

San Juan Basin Plan End of Chapter Exhibits

Exhibit 9-1. in text

Exhibit 9-2. in text

Exhibit 9-3. San Juan River Basin and Major Tributaries

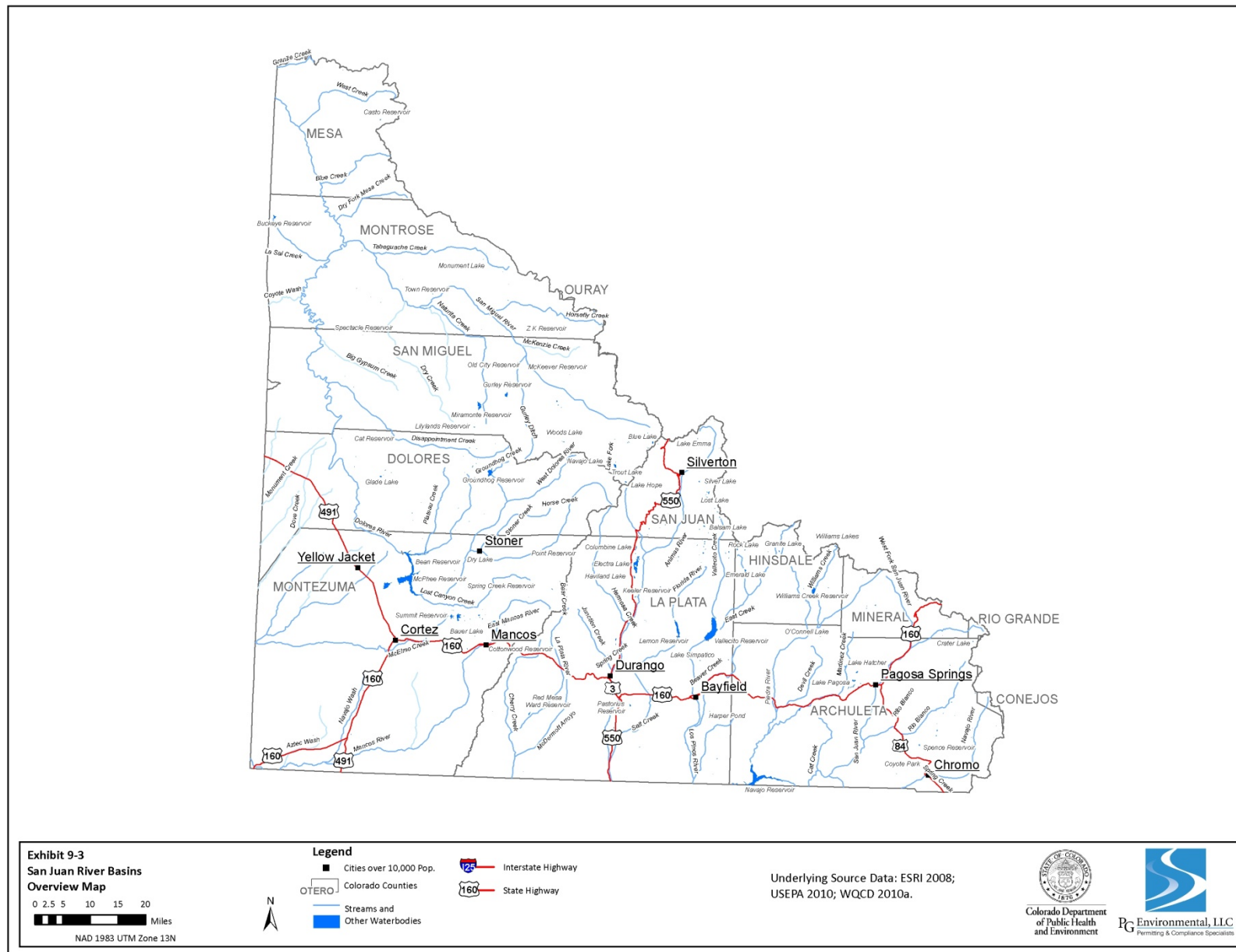


Exhibit 9-4. San Juan River Basin Level III Ecoregions

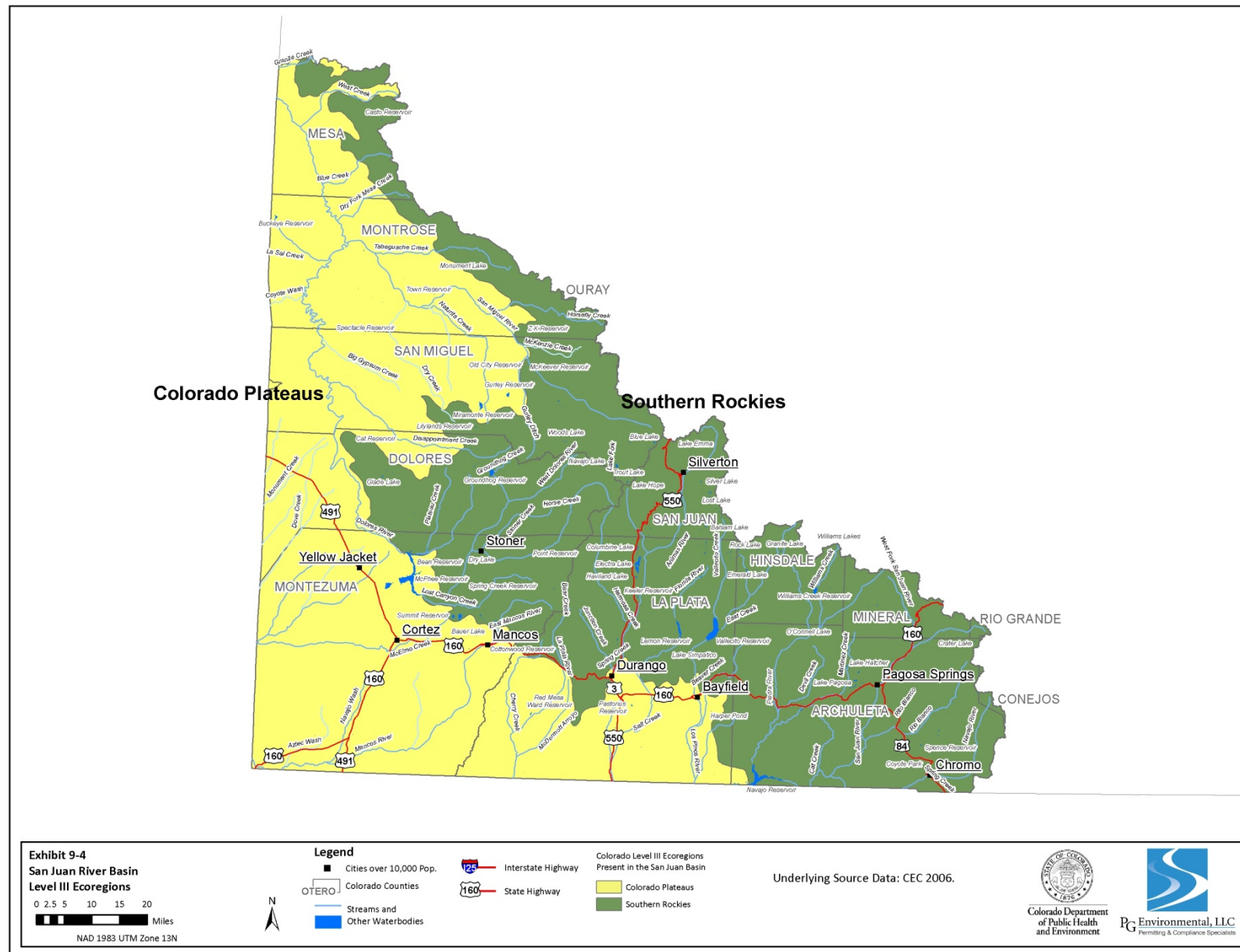
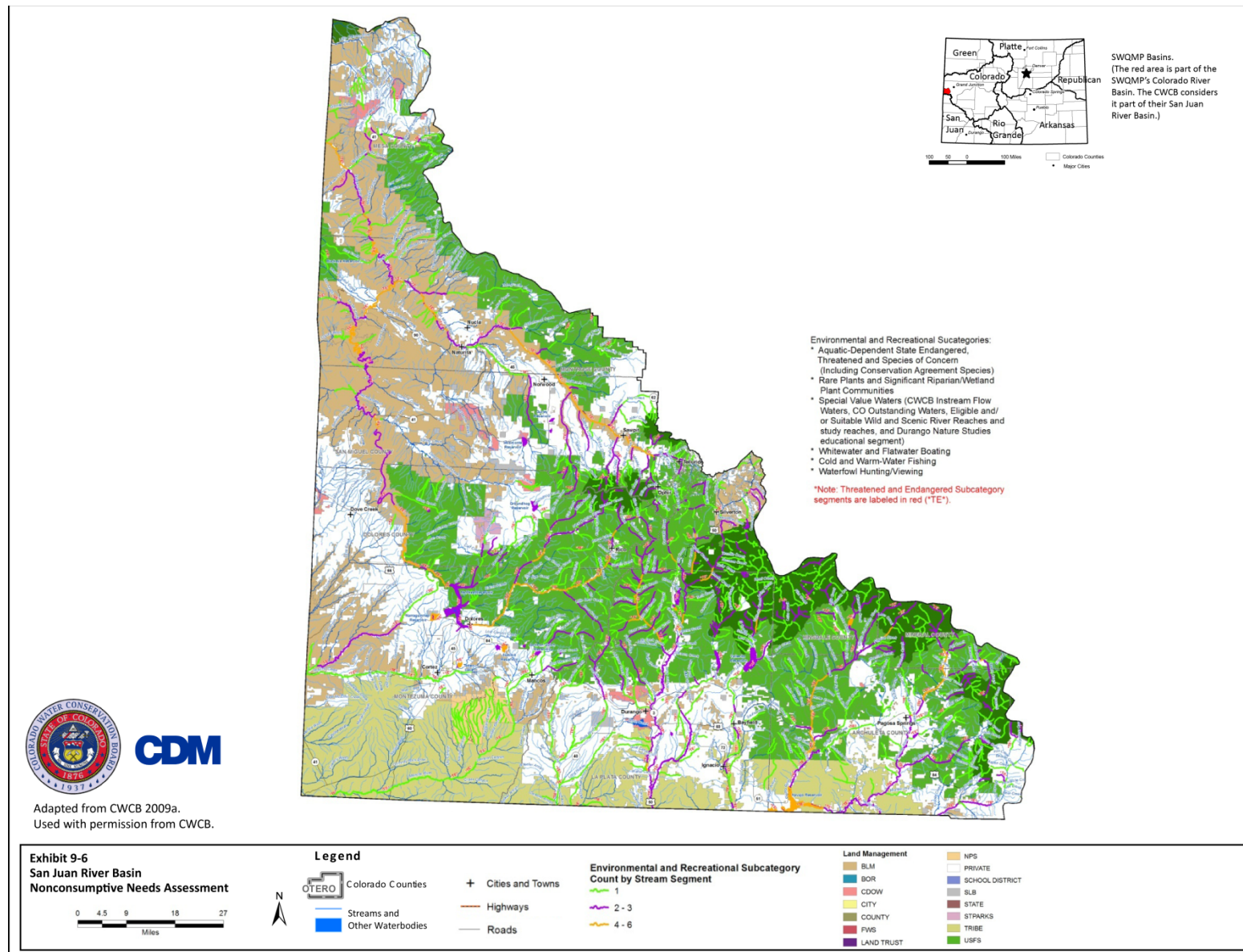


Exhibit 9-5. San Juan River Basin Endangered and Threatened Species

Species		Status	
		Federal	State
Endangered Species		Federal	State
Fish	Colorado Pikeminnow (<i>Ptychocheilus lucius</i>)	√	On state threatened list
Birds	Whooping Crane (<i>Grus americana</i>)	√	√
	Least Tern (<i>Sterna antillarum</i>)	√	√
	Southwestern Willow Flycatcher (<i>Empidonax traillii extimus</i>)	√	√
Mammals	Black-footed Ferret (<i>Mustela nigripes</i>)	√	√
	Lynx (<i>Lynx canadensis</i>)	On federal threatened list	√
	Wolverine (<i>Gulo gulo</i>)		√
	Kit Fox (<i>Vulpes macrotis</i>)		√
Plants	Milk-vetch, Mancos (<i>Astragalus humillimus</i>)	√	
	Knowlton Cactus (<i>pediocactus knowltonii</i>)	√	
Total Endangered Species		7	7
Threatened Species		Federal	State
Fish	Colorado Pikeminnow (<i>Ptychocheilus lucius</i>)	On federal endangered list	√
Birds	Bald Eagle (<i>Haliaeetus leucocephalus</i>)	√	√
	Mexican Spotted Owl (<i>Strix occidentalis lucida</i>)	√	√
	Burrowing Owl (<i>Athene cunicularia</i>)		√
Mammals	Lynx (<i>Lynx canadensis</i>)	√	On state endangered list
	River Otter (<i>Lontra canadensis</i>)		√
Plants	Mesa Verde Cactus (<i>Sclerocactus mesae-verdae</i>)	√	
Total Threatened Species		4	5
State Species of Special Concern (not a statutory category)		Federal	State
Fish	Colorado Roundtail Chub (<i>Gila Pandora</i>)		√
Amph.	Northern Leopard Frog (<i>Rana pipiens</i>)		√
Reptiles	Midget Faded Rattlesnake (<i>Crotalus viridis concolor</i>)		√
	Longnose Leopard Lizard (<i>Gambelia wislizenii</i>)		√
	Common King Snake (<i>Lampropeltis getula</i>)		√
Birds	Greater Sandhill Crane (<i>Crus canadensis tabida</i>)		√
	Gunnison Sage-grouse (<i>Centrocercus minimus</i>)		√
	American Peregrine Falcon (<i>Falco peregrinus anatum</i>)		√
	Western Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)		√
	Ferruginous Hawk (<i>Buteo regalis</i>)		√
	Greater Sage Grouse (<i>Centrocercus urophasianus</i>)		√

Species		Status	
		Federal	State
Mammals	Western Snowy Plover (<i>Charadrius alexandrinus</i>)		√
	Long-billed Curlew (<i>Numenius americanus</i>)		√
	Townsend's Big-eared Bat (<i>Corynorhinus townsendii pallescens</i>)		√
	Botta's Pocket Gopher (<i>Thomomys bottae rubidus</i>)		√
	Northern Pocket Gopher (<i>Thomomys talpoides macrotis</i>)		√
Total State Species of Special Concern		NA	16
Federal Candidate Species		Federal	State
Plants	Sleeping Ute Mild-vetch (<i>Astragalus tortipes</i>)	√	
Total Federal Candidate Species		1	NA

Sources: CDOW 2010c; CWCB 2004.

Exhibit 9-6. San Juan River Basin Nonconsumptive Needs Assessment¹

¹ The nonconsumptive needs assessment map focuses on environmental and recreational areas for the following purposes: (1) to serve as a guide for water supply planning to avoid future conflicts over environmental and recreational needs; (2) to assist in identifying environmental and recreational water needs status; (3) to help basins plan for the water needs of species of special concern; and (4) to provide opportunity for collaborative efforts for future multi-objective projects. The CWCB Southwest Basin map was developed using stream and individual lake segments. The subcategories of environmental and recreational uses associated with the Southwest Basin are shown in the exhibit. Additional information on the environmental and recreational areas included in the CWCB Southwest Basin can be found in appendix D of CWCB 2009a.

Exhibit 9-7. San Juan River Basin Precipitation

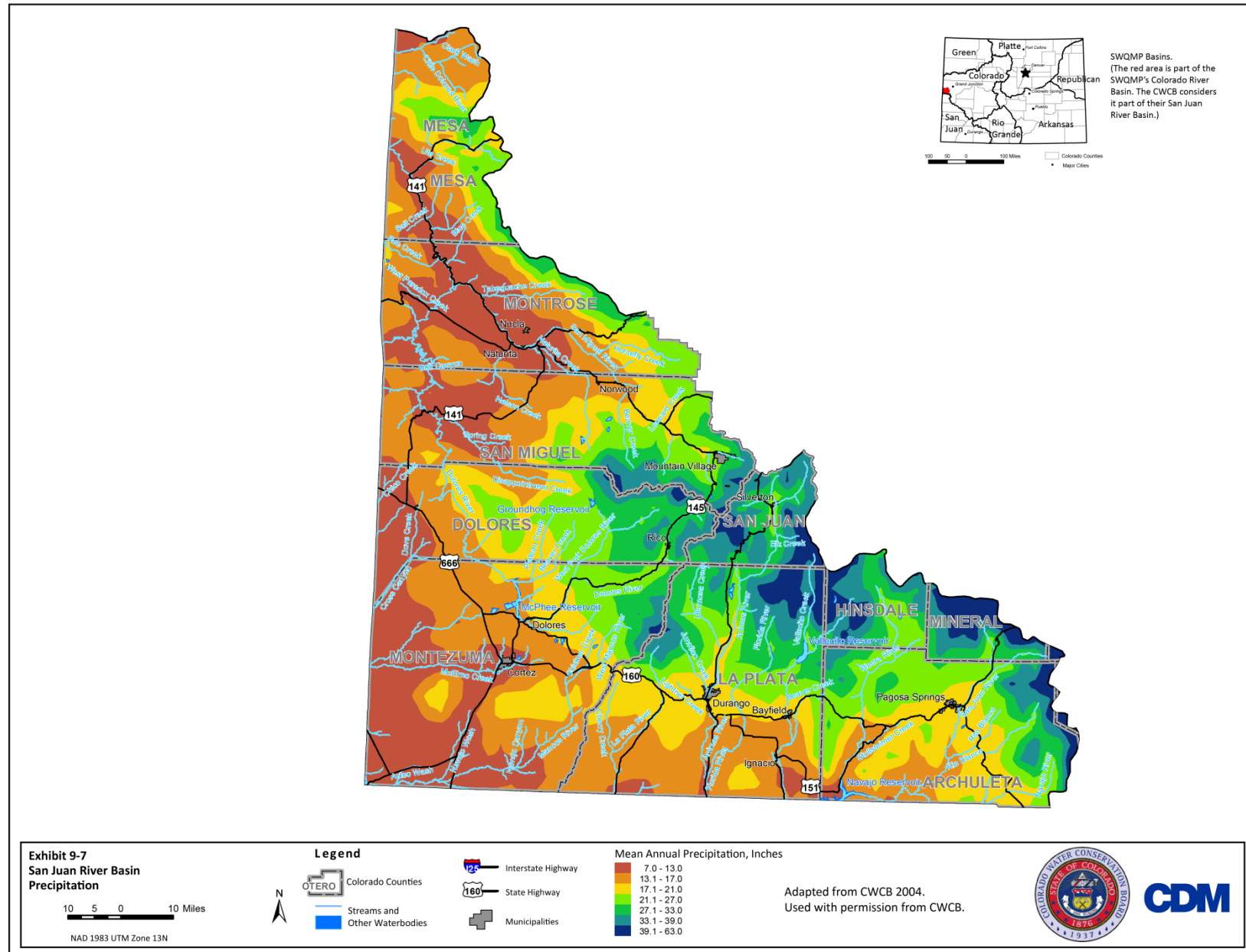


Exhibit 9-8. San Juan River Basin Land Ownership

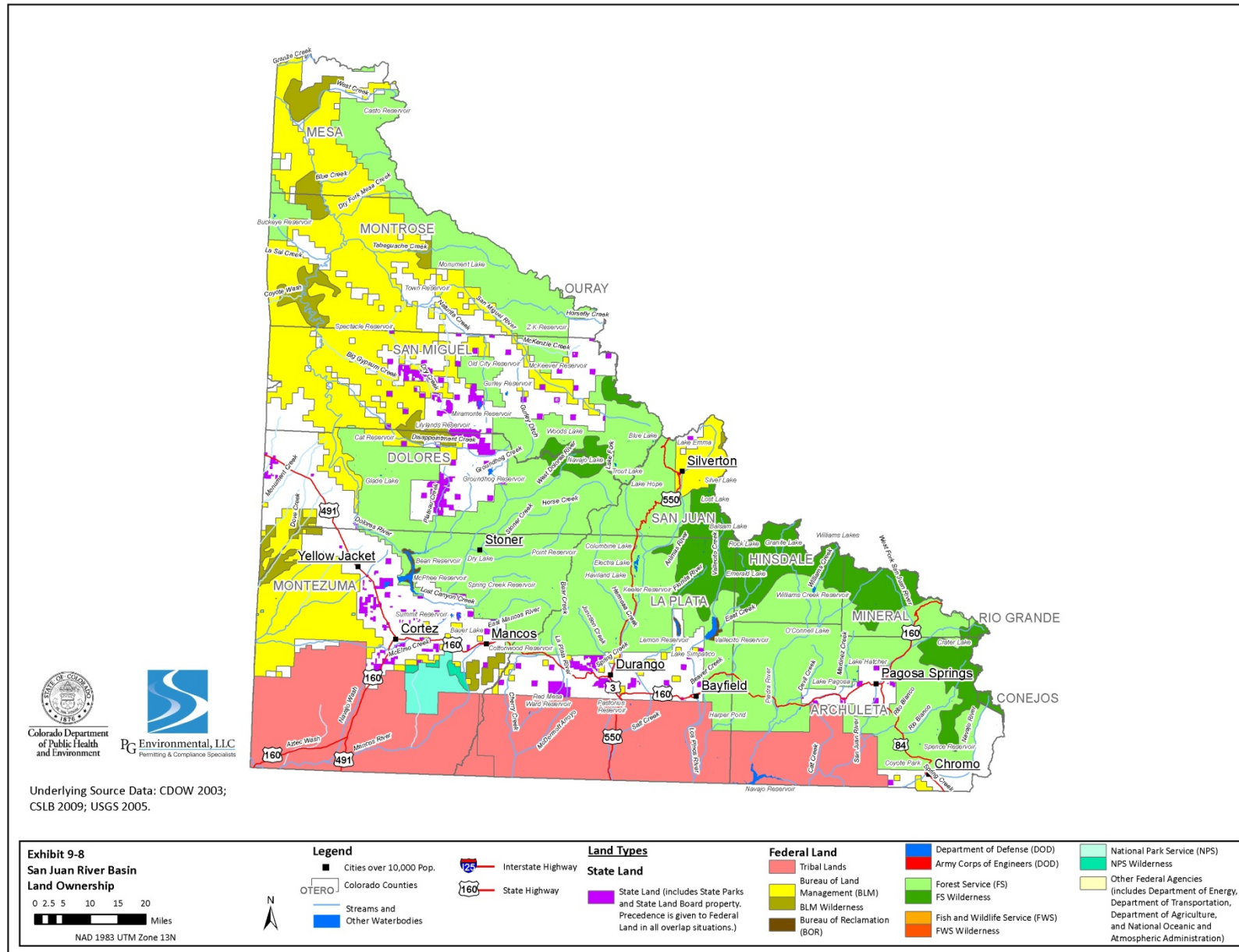


Exhibit 9-9. San Juan River Basin Land Cover

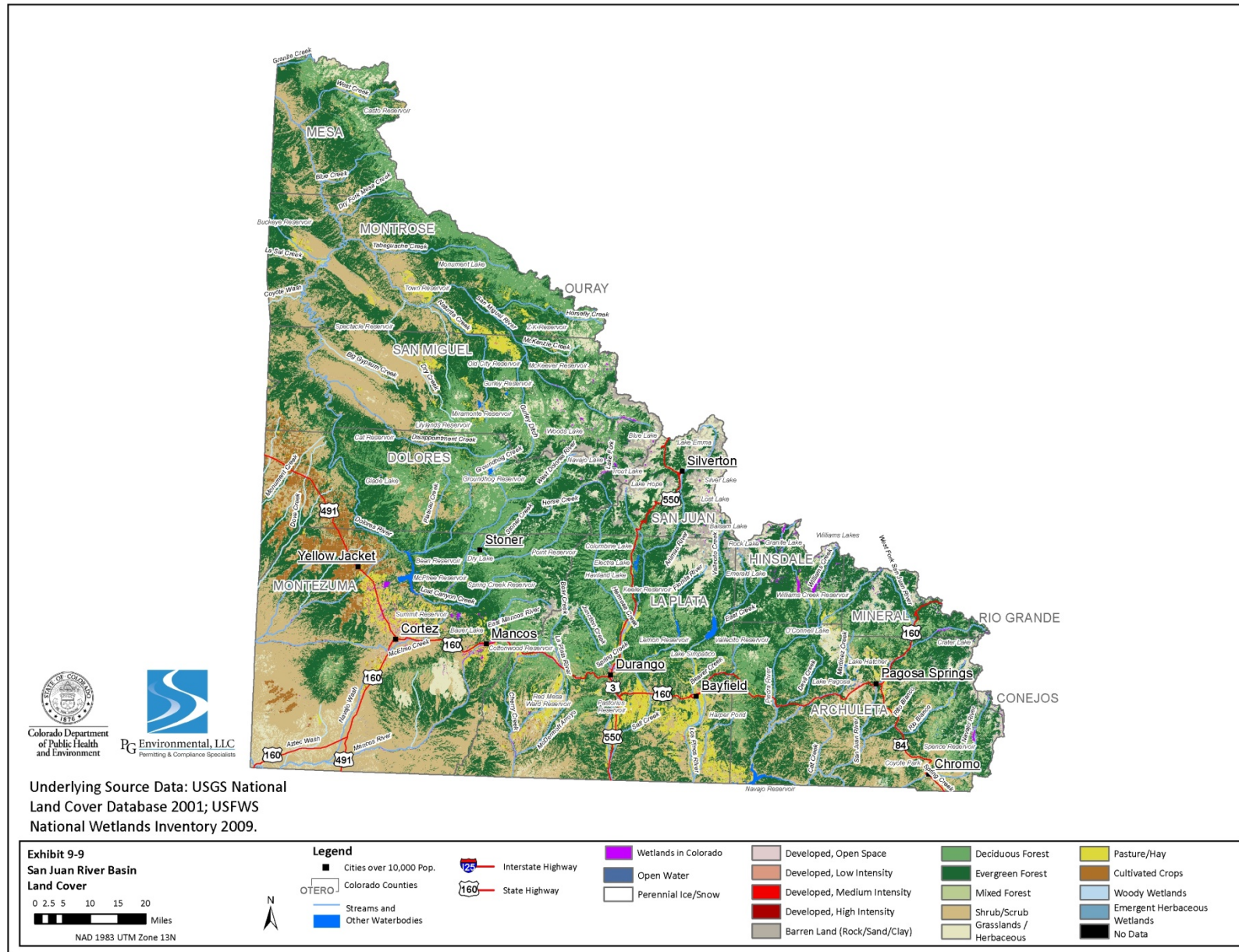
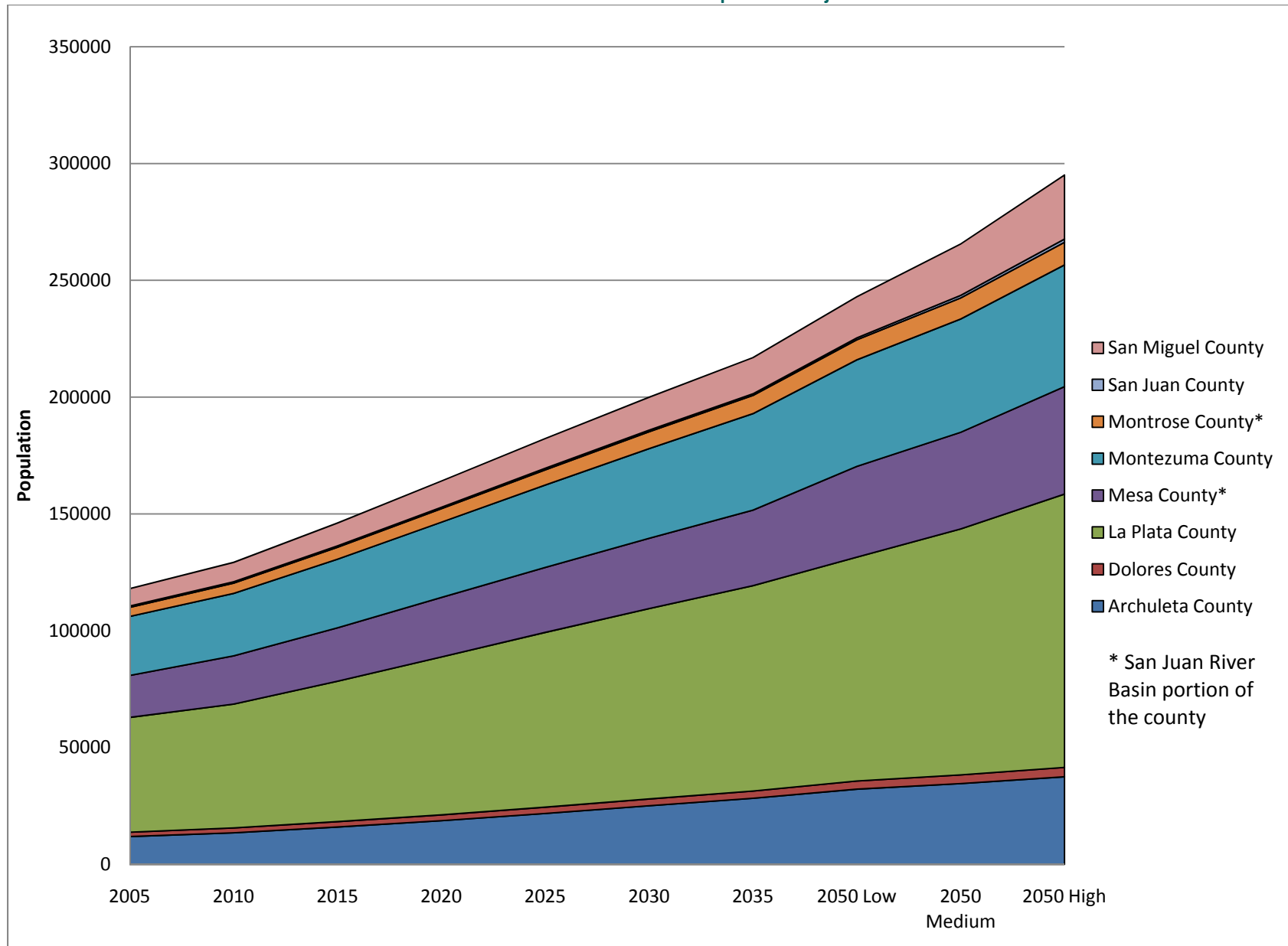


Exhibit 9-10. in text

Exhibit 9-11. San Juan River Basin Population Projections



Source: CWCB 2010, DOLA 2010.

Exhibit 9-12. in text

Exhibit 9-13. in text

Exhibit 9-14. in text

Exhibit 9-15. San Juan River Basin Key Diversions and Streamflow Gauges

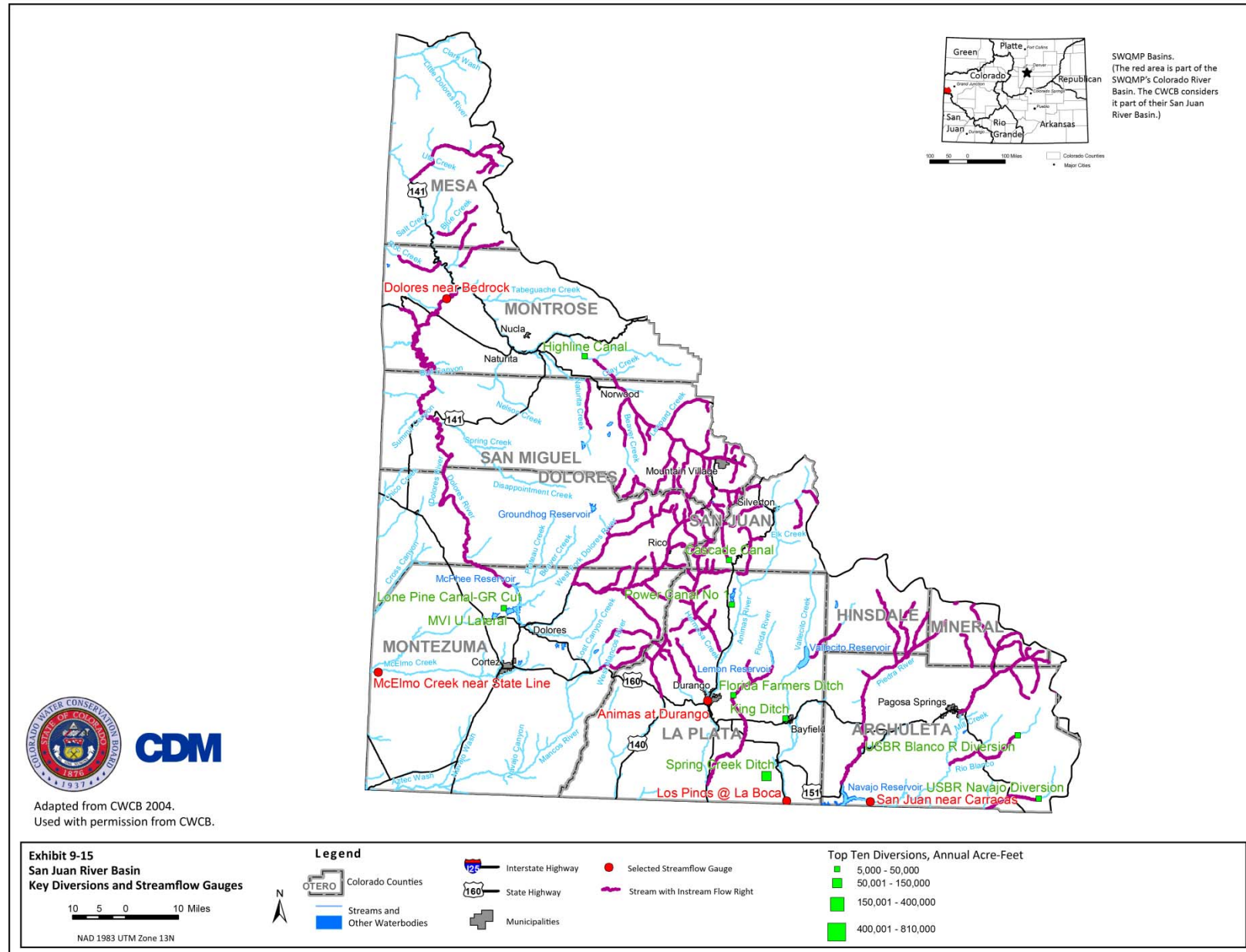


Exhibit 9-16. San Juan River Basin Wells and Aquifers

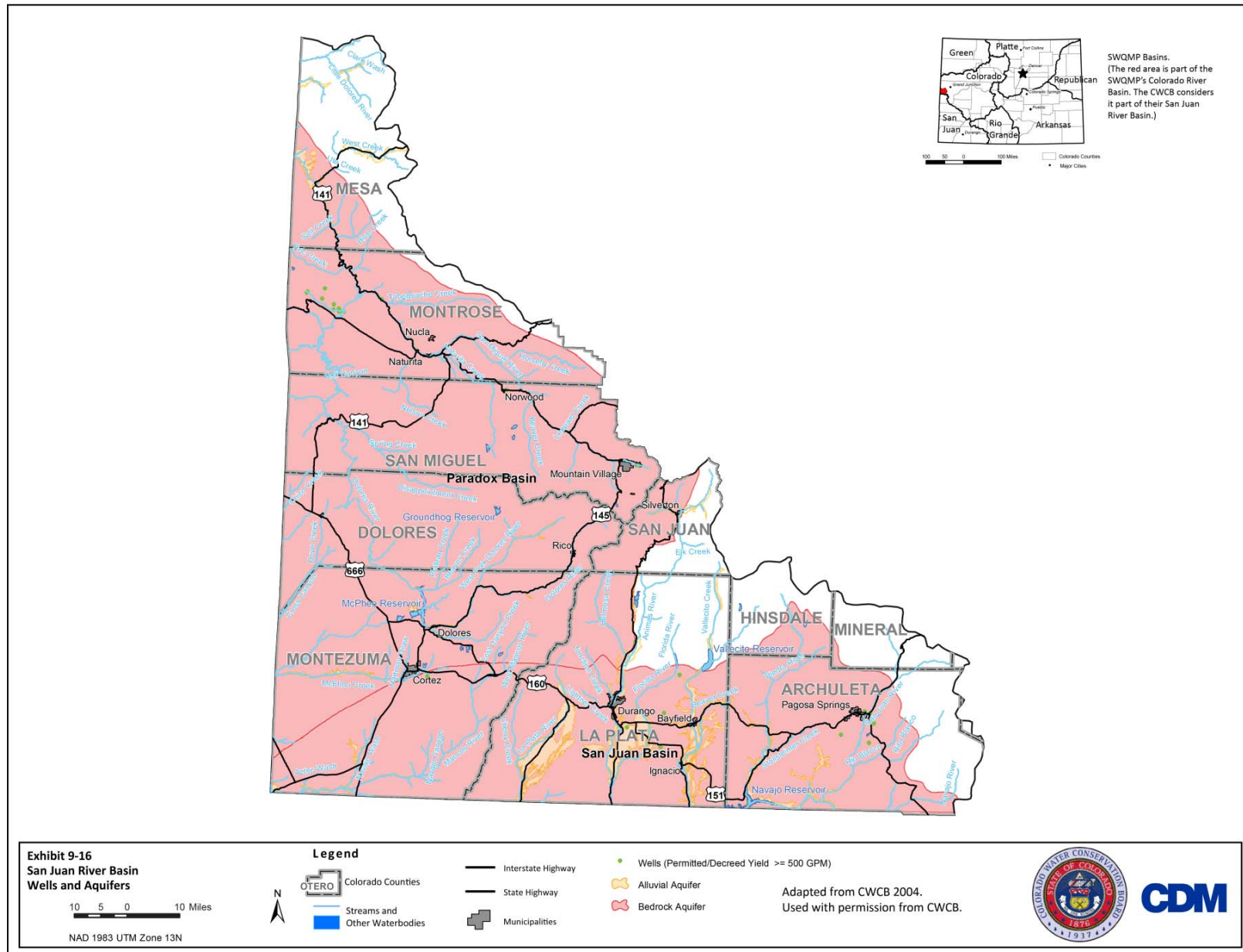


Exhibit 9-17. San Juan River Basin Classified Waterbody Segments

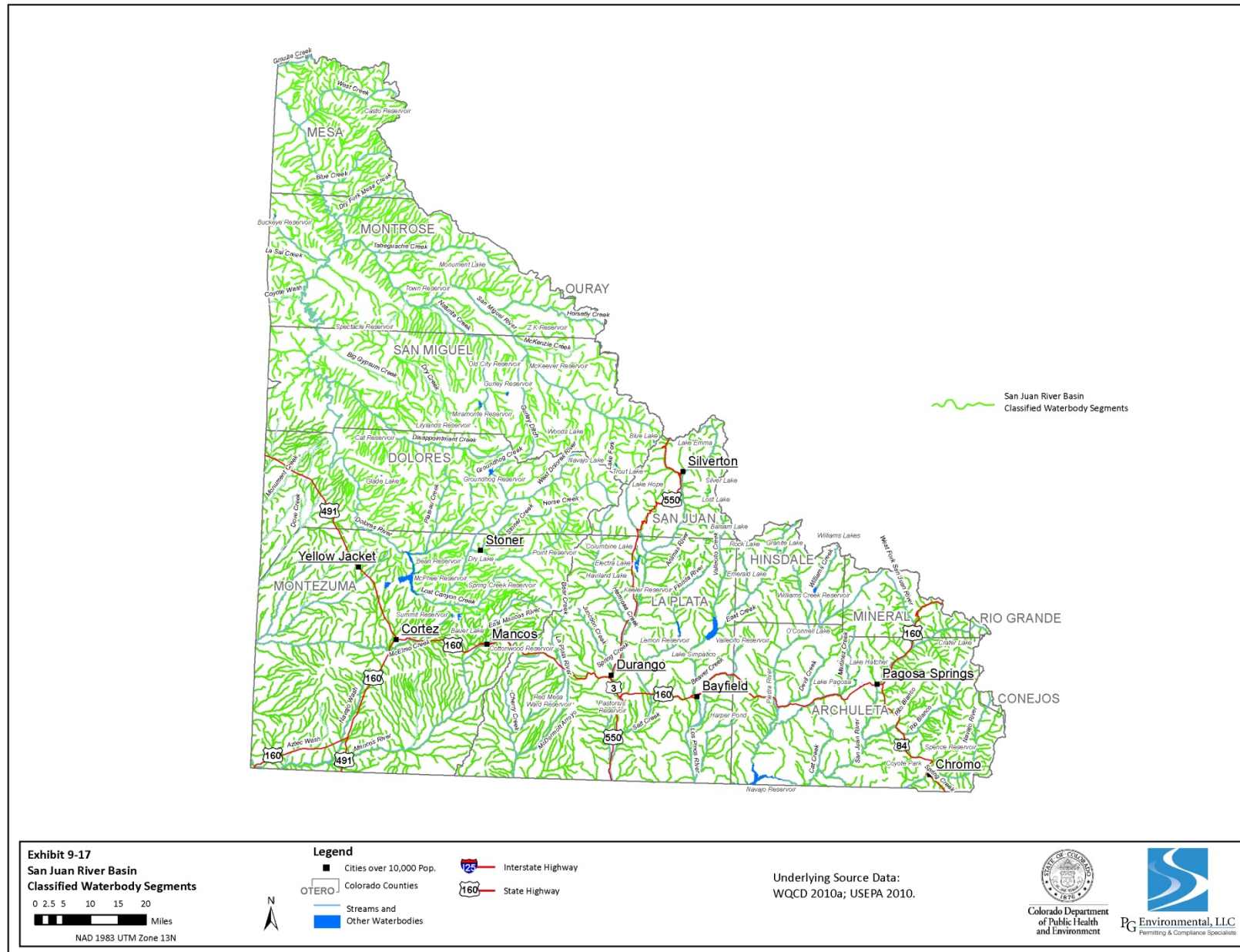


Exhibit 9-18. San Juan River Basin Use Classifications for Waterbody Segments

Sub-Basin	Aquatic Life				Recreation				Water Supply	Agriculture	Designations	
	Cold 1	Cold 2	Warm 1	Warm 2	Existing	Potential	Not Suitable	Undetermined			Outstanding Waters	Use Protected
Totals Basin-Wide												
Segments (n=114)	60	19	11	20	104	9	19	0	65	111	8	21
Segments as Percent of Total	53%	17%	10%	21%	91%	8%	17%	0%	57%	97%	7%	18%
Miles (n=10,150.03) ¹	3,519.36	1,835.02	659.56	4,087.36	8,718.33	1,072.20	2,081.21	0	5,186.95	9,446.50	663.23	3,217.15
Miles as Percent of Total ¹	35%	18%	7%	40%	86%	11%	21%	0%	51%	93%	7%	32%

¹ Lake acres are not shown.

Sources: WQCC 2010a, 2010b; WQCD 2010a, appendices A and B.

Exhibit 9-19. San Juan River Basin Use Classifications by Waterbody Segment

Stream Segment ¹	Segment Description ¹	Stream Miles ¹	Aquatic Life ¹				Recreation ¹				Water Supply ¹	Agriculture ¹	Designation ¹
			Cold 1	Cold 2	Warm 1	Warm 2	Existing	Potential	Not Suitable	Undetermined			
San Juan River Basin (COSJSJ)													
1	Mainstem of the Navajo River and the Little Navajo River, including all wetlands, tributaries, lakes, and reservoirs, from the boundary of the South San Juan Wilderness Area to the Colorado/New Mexico border.	152.50	•				•				•	•	
2	Mainstem of the Navajo River from the Colorado/New Mexico border to the confluence with the San Juan River (Southern Ute Indian Reservation).	4.66	•				•				•	•	
3	Mainstem of the Little Navajo River from the San Juan-Chama diversion to the confluence with the Navajo River; all tributaries to the Navajo River and the Little Navajo River, including all wetlands, lakes and reservoirs, from the San Juan-Chama diversions to the confluence with the San Juan River.	38.30				•		• ²	• ²			•	
4	All tributaries to the San Juan River, Rio Blanco, and Navajo River, including all wetlands, lakes, and reservoirs, which are within the Weminuche Wilderness Area and South San Juan Wilderness Area.	96.90	•				•				•	•	OW ³
5	Mainstem of the San Juan River and East Fork and West Fork of the San Juan River, from the boundary of the Weminuche Wilderness Area (West Fork) and the source (East Fork) to the confluence with Fourmile Creek, including all wetlands, tributaries, lakes, and reservoirs.	174.20	•				•				•	•	
6a + L	Mainstem of the San Juan River from the confluence with Fourmile Creek to Southern Ute Indian Reservation northern boundary. Mainstem of Mill Creek from the source to the confluence with the San Juan River. Echo Canyon Reservoir.	26.30 ⁴	•				•				•	•	
6b	Mainstem of San Juan River from the Southern Ute Indian Reservation northern boundary to Navajo Reservoir.	28.50	•				•				•	•	
8	Navajo Reservoir.	⁵			•		•				•	•	

Stream Segment ¹	Segment Description ¹	Stream Miles ¹	Aquatic Life ¹				Recreation ¹				Water Supply ¹	Agriculture ¹	Designation ¹
			Cold 1	Cold 2	Warm 1	Warm 2	Existing	Potential	Not Suitable	Undetermined			
9a	Mainstem of the Rio Blanco, including all tributaries, wetlands, lakes, and reservoirs, from the boundary of South San Juan Wilderness Area to the Southern Ute Indian Reservation boundary.	164.50	•				•				•	•	
9b	Mainstem of the Rio Blanco, including all tributaries, wetlands, lakes, and reservoirs, from the boundary of the Southern Ute Indian Reservation to the confluence with the San Juan River.	2.50	•				•				•	•	
10	Mainstem of the Rio Blanco River from Echo Ditch to the confluence with the Rio Blanco River.	9.74		•			•					•	
11a	All tributaries to the San Juan River, including wetlands, lakes, and reservoirs, from Fourmile Creek to the Southern Ute Indian Reservation boundary.	106.10			•		• ⁶		• ⁶			•	
11b	All tributaries to the San Juan River, including wetlands, lakes, and reservoirs from the Southern Ute Indian Reservation boundary to the Colorado/New Mexico border.	21.60			•		• ⁶		• ⁶			•	
12a	All tributaries to the San Juan River in Archuleta County, including all wetlands, lakes, and reservoirs.	48.50				•		• ³	• ³			•	UP ⁷
12b	All tributaries to the San Juan River in Archuleta County within the Southern Ute Indian Reservation.	71.70				•		• ³	• ³			•	UP
Subtotal Segments		15	8	1	3	3	12	3	5	0	9	15	3
Subtotal Miles⁸		946.00	650.06	9.74	127.70	158.50	787.50	158.50	286.20	0	650.06	946.00	217.10
Piedra River Basin (COSJPI)													
1	All tributaries to the Piedra River, including all wetlands, lakes, and reservoirs, which are within the Weminuche Wilderness Area.	68.10	•				•				•	•	OW
2	Mainstem of the Piedra River, including the East and Middle Forks, from the boundary of the Weminuche Wilderness Area to the confluence with Indian Creek.	26.10	•				• ⁷		• ⁷		•	•	
3	Mainstem of the East Fork of the Piedra River from the Piedra Falls Ditch to the confluence with Pagosa Creek.	3.72	•				• ⁷		• ⁷		•	•	

Stream Segment ¹	Segment Description ¹	Stream Miles ¹	Aquatic Life ¹				Recreation ¹				Water Supply ¹	Agriculture ¹	Designation ¹
			Cold 1	Cold 2	Warm 1	Warm 2	Existing	Potential	Not Suitable	Undetermined			
4a	Mainstem of the Piedra River from the confluence with Indian Creek to Southern Ute Indian Reservation.	13.60	•				•				•	•	
4b	Mainstem of the Piedra River from the Southern Ute Indian Reservation boundary to Navajo Reservoir.	8.53	•				•				•	•	
5 + L	All tributaries to the Piedra River, including all wetlands, lakes, and reservoirs, from the boundary of the Weminuche Wilderness Area to a point immediately below the confluence with Devil Creek. Williams Creek Reservoir.	258.70 ⁹	•				• ⁷		• ⁷		•	•	
6a	All tributaries to the Piedra River, including all wetlands, lakes, and reservoirs, from a point immediately below the confluence with Devil Creek to Southern Ute Indian Reservation boundary.	106.90				•		•			•	•	UP
6b	All tributaries, including wetlands, lakes, and reservoirs, to the Piedra River from the Southern Ute Indian Reservation boundary to Navajo Reservoir.	39.70				•		•			•	•	UP
7	Hatcher Lake, Stevens Lake, Pagosa Lake, Village Lake, and Forest Lake.	¹⁰			•		• ⁷		• ⁷		•	•	
Subtotal Segments		9	6	0	1	2	7	2	4	0	9	9	3
Subtotal Miles⁸		525.35	378.75	0	0	146.60	378.75	146.60	488.52	0	525.35	525.35	214.70
Los Pinos River Basin (COSJPN)													
1	All tributaries to the Los Pinos River, including all wetlands, lakes, and reservoirs, which are within the Weminuche Wilderness Area.	169.30	•				•				•	•	OW
2a	Mainstem of the Los Pinos River from the boundary of the Weminuche Wilderness Area to the boundary of the Southern Ute Indian Reservation.	25.70	•				•				•	•	
2b	Mainstem of the Los Pinos River from the boundary of the Southern Ute Indian Reservation to the Colorado/New Mexico border.	17.00	•				•				•	•	
3	Vallecito Reservoir.	¹¹	•				•				•	•	

Stream Segment ¹	Segment Description ¹	Stream Miles ¹	Aquatic Life ¹				Recreation ¹				Water Supply ¹	Agriculture ¹	Designation ¹
			Cold 1	Cold 2	Warm 1	Warm 2	Existing	Potential	Not Suitable	Undetermined			
4a	All tributaries to the Los Pinos River and Vallecito Reservoir, including all wetlands, lakes, and reservoirs, from the boundary of the Weminuche Wilderness Area to a point immediately below the confluence with Bear Creek (T35N, R7W); mainstems of Beaver Creek, Ute Creek, and Spring Creek from their sources to the boundary of the Southern Ute Indian Reservation.	90.30	•				•				•	•	
4b	Mainstems of Beaver Creek, Ute Creek, and Spring Creek from the boundaries of the Southern Ute Indian Reservation to their confluences with the Los Pinos River.	30.10	•				•				•	•	
5	Mainstem of Vallecito Creek from the boundary of the Weminuche Wilderness Area to Vallecito Reservoir.	3.34	•				•				•	•	
6a	All tributaries to the Los Pinos River, including all wetlands, lakes, and reservoirs, from a point immediately below the confluence with Bear Creek (T35N, R7W) to the boundary of the Southern Ute Indian Reservation.	62.20		•			•					•	
6b	All tributaries to the Los Pinos River, including all wetlands, lakes, and reservoirs, from the Southern Ute Indian Reservation boundary to the Colorado/New Mexico border.	78.60		•			•					•	
7a	All tributaries to the San Juan River in La Plata County.	12		•			•					•	
7b	All tributaries to the San Juan River in La Plata County within the Southern Ute Indian Reservation.	31.40		•			•					•	
Subtotal Segments		11	7	4	0	0	11	0	0	0	7	11	1
Subtotal Miles⁸		507.94	335.74	172.20	0	0	507.94	0	0	0	335.74	507.94	169.30
Animas and Florida River Basin (COSJAF)													
1	All tributaries to the Animas River and Florida River, including all wetlands, lakes, and reservoirs, which are within the Weminuche Wilderness Area.	84.40	•				•				•	•	OW
2	Mainstem of the Animas River, including all tributaries and wetlands, from the outlet of Denver Lake to a point immediately above the confluence with Maggie Gulch.	22.90					•					•	UP

Stream Segment ¹	Segment Description ¹	Stream Miles ¹	Aquatic Life ¹				Recreation ¹				Water Supply ¹	Agriculture ¹	Designation ¹
			Cold 1	Cold 2	Warm 1	Warm 2	Existing	Potential	Not Suitable	Undetermined			
3a	Mainstem of the Animas River, including wetlands, from a point immediately below the confluence with Maggie Gulch to immediately above the confluence with Cement Creek.	11.90	•				•					•	
3b	Mainstem of the Animas River, including wetlands, from a point immediately above the confluence with Cement Creek to a point immediately above the confluence with Mineral Creek.	0.83					• ¹³		• ¹³				UP
3c	Arrastra Gulch including all lakes, tributaries, and wetlands from the source to the confluence with the Animas River.	2.81		•			•					•	UP
4a	Mainstem of the Animas River, including wetlands, from a point immediately above the confluence with Mineral Creek to a point immediately above the confluence with Deer Park Creek.	7.25		•			•					•	UP
4b	Mainstem of the Animas River, including wetlands, from a point immediately above the confluence with Deer Park Creek to Bakers Bridge.	48.30	•				•				•	•	
5a	Mainstem of the Animas River, including wetlands, from Bakers Bridge to the Southern Ute Indian Reservation boundary.	6.18	•				•				•	•	
5b	Mainstem of the Animas River, including wetlands, from the Southern Ute Indian Reservation boundary to the Colorado/New Mexico border.	20.20	•				•				•	•	
6	Mainstem of the Animas River from the source to the outlet of Denver Lake. Mainstem, including all tributaries, wetlands, lakes, and reservoirs of Cinnamon Creek, Grouse Creek, Picayne Gulch, and Minnie Gulch. All tributaries, including the tributaries' wetlands, lakes, and reservoirs, to the Animas River from immediately above Maggie Gulch to Elk Park.	26.90	•				•				•	•	
7	Mainstem of Cement Creek, including all tributaries, wetlands, lakes, and reservoirs, from the source to the confluence with the Animas River.	12.30					•					•	UP

Stream Segment ¹	Segment Description ¹	Stream Miles ¹	Aquatic Life ¹				Recreation ¹				Water Supply ¹	Agriculture ¹	Designation ¹
			Cold 1	Cold 2	Warm 1	Warm 2	Existing	Potential	Not Suitable	Undetermined			
8	Mainstem of Mineral Creek, including wetlands, from the source to a point immediately above the confluence with South Mineral Creek. All tributaries on the east side of this segment of Mineral Creek, including wetlands, lakes, and reservoirs except for Big Horn Creek. Mainstem of the Middle Fork of Mineral Creek, including all tributaries, wetlands, lakes, and reservoirs from the source to the confluence with Mineral Creek except for Crystal Lake and its exiting tributary to confluence with Middle Fork of Mineral Creek.	12.70					•					•	UP
9	Mainstem of Mineral Creek, including wetlands, from immediately above the confluence with South Mineral Creek to the confluence with the Animas River.	22.30		•			•					•	UP
10	Mainstem of the Florida River from the boundary of the Weminuche Wilderness Area to the Florida Farmers Canal Headgate.	19.00	•				•				•	•	
11a	Mainstem of the Florida River from the Florida Farmers Canal Headgate to the Southern Ute Indian Reservation boundary.	3.37	•				•				•	•	
11b	Mainstem of the Florida River from the Southern Ute Indian Reservation boundary to the confluence with the Animas River.	22.30	•				•				•	•	
12a	All tributaries to the Animas River, including all lakes and reservoirs, from a point immediately above the confluence with Elk Creek to a point immediately below the confluence with Hermosa Creek. All tributaries to the Florida River, including all lakes and reservoirs from the source to the outlet of Lemon Reservoir except the specific listing in Segment 1. Mainstems of True, Red, and Shearer creeks from their sources to their confluences with the Florida River.	299.60	•				•				•	•	
12b	Lemon Reservoir.	¹⁴	•				•				•	•	
12c	Hermosa Creek, including all tributaries, from the source to immediately below the confluence with Long Hollow, except for the East Fork of Hermosa Creek.	102.89	•				•				•	•	OW

Stream Segment ¹	Segment Description ¹	Stream Miles ¹	Aquatic Life ¹				Recreation ¹				Water Supply ¹	Agriculture ¹	Designation ¹
			Cold 1	Cold 2	Warm 1	Warm 2	Existing	Potential	Not Suitable	Undetermined			
13a	Mainstem of Junction Creek including all tributaries, from U.S. Forest Boundary to confluence with the Animas River.	10.50		•			•					•	
13b	All tributaries to the Animas River, including all lakes and reservoirs, from a point immediately below the confluence with Hermosa Creek to the Southern Ute Indian Reservation boundary; all tributaries to the Florida River, including all lakes and reservoirs, from the outlet of Lemon Reservoir to the Southern Ute Indian Reservation boundary.	146.00		•			•				•	•	
13c	All tributaries to the Animas River, including all lakes and reservoirs, from the Southern Ute Indian Reservation boundary to the Colorado/New Mexico border; all tributaries to the Florida River from the Southern Indian Reservation boundary to the confluence with the Animas River.	166.70		•			•				•	•	
14	Mainstem of Lightner Creek from the source to the confluence with the Animas River.	15.00	•				•				•	•	
15	Mainstem of Purgatory Creek from source to Cascade Creek, Goulding Creek from the source to Elbert Creek, and Nary Draw from the source to Haviland Lake.	6.40		•			•				•	•	
Subtotal Segments		24	13	7	0	0	24	0	1	0	15	23	9
Subtotal Miles⁸		1,070.73	660.04	361.96	0	0	1,070.73	0	0.83	0	967.24	1,069.90	268.38
La Plata River, Mancos River, McElmo Creek, and San Juan (COSJLP)													
1	Mainstem of the La Plata River, including all wetlands, tributaries, lakes, and reservoirs, from the source to the Hay Gulch diversion south of Hesperus.	43.00	•					•			•	•	
2a	Mainstem of the La Plata River from the Hay Gulch diversion south of Hesperus to the boundary of Southern Ute Indian Reservation.	6.32		•			• ⁶		• ⁶			•	
2b	Mainstem of the La Plata River from the boundary of the Southern Ute Indian Reservation to the Colorado/New Mexico border.	21.40				•	• ¹⁵	• ¹⁵				•	UP

Stream Segment ¹	Segment Description ¹	Stream Miles ¹	Aquatic Life ¹				Recreation ¹				Water Supply ¹	Agriculture ¹	Designation ¹
			Cold 1	Cold 2	Warm 1	Warm 2	Existing	Potential	Not Suitable	Undetermined			
3a	All tributaries to the La Plata River, including all wetlands, lakes, and reservoirs, from the Hay Gulch diversions south of Hesperus to the Southern Ute Indian Reservation boundary.	99.60				•			•			•	UP
3b	All tributaries to the La Plata River, including all wetlands, lakes, and reservoirs, from the boundary of the Southern Ute Indian Reservation to the Colorado/New Mexico border.	281.30				•			•			•	UP
4a	Mainstem of the Mancos River, including all wetlands, tributaries, lakes, and reservoirs, from the source of the East, West and Middle Forks to Hwy 160.	134.90	•				• ⁶		• ⁶		•	•	
4b	Mancos Reservoir (Jackson Gulch Reservoir).	⁹	•				•				•	•	
5a	Mainstem of the Mancos River from Hwy 160 to the boundary of the Ute Mountain Indian Reservation and mainstem of Weber Canyon from source to confluence with Mancos River.	21.30				•	• ⁶		• ⁶			•	
5b	Mainstem of the Mancos River from the boundary of the Ute Mountain Indian Reservation to the Colorado/New Mexico border.	58.20				•	• ⁶		• ⁶			•	
6a	All tributaries to the Mancos River, including all wetlands, lakes, and reservoirs, from Hwy 160 to the boundary of the Ute Mountain Indian Reservation.	218.10				•		• ²	• ²				
6b	All tributaries to the Mancos River, including all wetlands, lakes, and reservoirs, from the boundary of the Ute Mountain Indian Reservation to the Colorado/New Mexico border.	484.60				•		• ²	• ²				
6c	All tributaries to the Mancos River located in Mesa Verde National Park.	98.84			•		•					•	OW
7a	Mainstem of McElmo Creek from the source to the Colorado/Utah border. Mainstem of Yellow Jacket Creek, including all tributaries, wetlands, lakes, and reservoirs, from the source to the confluence with McElmo Creek.	308.40			•		•					•	
7b	Mainstem of McElmo Creek within Ute Mountain Indian Reservation.	7.55			•		•					•	

Stream Segment ¹	Segment Description ¹	Stream Miles ¹	Aquatic Life ¹				Recreation ¹				Water Supply ¹	Agriculture ¹	Designation ¹
			Cold 1	Cold 2	Warm 1	Warm 2	Existing	Potential	Not Suitable	Undetermined			
8a	All tributaries to McElmo Creek, including all wetlands, lakes, and reservoirs, from the source to the Colorado/Utah border.	356.70				•	•					•	UP
8b	All tributaries to McElmo Creek, including all wetlands, lakes, and reservoirs, within the Ute Mountain Indian Reservation.	61.40				•	•					•	UP
8c	Unnamed tributary to Ritter Draw.	0.96				•	•					•	UP
9	Mainstem of the San Juan River in Montezuma County.	3.47			•		•					•	
10a	All tributaries to the San Juan River in Montezuma and Dolores Counties, including all wetlands, lakes, and reservoirs.	378.90				•	•					•	UP
10b	All tributaries to the San Juan River in Montezuma County within the Ute Mountain Indian Reservation, including all wetlands, lakes, and reservoirs.	170.00				•	•					•	UP
11	Narraguinnep, Puett, and Totten Reservoirs.	16			•		•				•	•	
Subtotal Segments		21	3	1	5	12	16	4	8	0	4	19	9
Subtotal Miles⁸		2,754.94	177.90	6.32	418.26	2,152.46	1,628.34	767.10	1304.32	0	177.90	2,052.24	1,469.10
Dolores River (COSJDO)													
1	All tributaries to the Dolores River and West Dolores River, including all wetlands, tributaries, lakes, and reservoirs, which are within the Lizard Head Wilderness area.	17.00	•				•				•	•	OW
2	Mainstem of the Dolores River from the source to a point immediately above the confluence with Horse Creek.	13.60	•				•				•	•	
3	Mainstem of the Dolores River from a point immediately above the confluence with Horse Creek to a point immediately above the confluence with Bear Creek.	16.00	•				•					•	
4a	Mainstem of the Dolores River from a point immediately above the confluence with Bear Creek to the bridge at Bradfield Ranch (Forest Route 505, near Montezuma/Dolores County Line).	37.40	•				•				•	•	
4b	McPhee Reservoir and Summit Reservoir.	17	•				•				•	•	

Stream Segment ¹	Segment Description ¹	Stream Miles ¹	Aquatic Life ¹				Recreation ¹				Water Supply ¹	Agriculture ¹	Designation ¹
			Cold 1	Cold 2	Warm 1	Warm 2	Existing	Potential	Not Suitable	Undetermined			
5 + L	All tributaries to the Dolores River and West Dolores River, including all wetlands, lakes and reservoirs, from the source to a point immediately below the confluence with the West Dolores River except for specific listings in Segments 1 and 6 through 10; mainstem of Beaver Creek (including Plateau Creek) from the source to the confluence with the Dolores River. Groundhog Reservoir.	331.29 ⁹	•				•				•	•	
6	Mainstem of the Slate Creek and Coke Oven Creek, from the Lizard Head Wilderness Area boundary to their confluences with the Dolores River.	3.05	•				•				•	•	
7	Mainstem of Coal Creek from the boundary of the Lizard Head Wilderness Area to the confluence with the Dolores River.	2.48	•				•				•	•	
8	Mainstem of Horse Creek from the source to the confluence with the Dolores River.	2.85	•				•				•	•	
9	Mainstem of Silver Creek from a point immediately below the Town of Rico's water supply diversion to the confluence with the Dolores River.	1.34		•			•		•			•	
10	Mainstem of the West Dolores River from the Lizard Head Wilderness Area boundary to the confluence with the Dolores River.	27.50	•				•				•	•	
11	All tributaries to the Dolores River, including all wetlands, lakes, and reservoirs, from a point immediately below the confluence of the West Dolores River, to the bridge at Bradfield Ranch (Forest Route 505, near Montezuma/Dolores County Line), except for the specific listing in Segments 4 and 5.	523.60		•			•				•	•	
Subtotal Segments		12	10	2	0	0	12	0	1	0	10	12	1
Subtotal Miles⁹		976.11	451.17	524.94	0	0	976.11	0	1.34	0	958.77	976.11	17.00
Lower Dolores River (COGULD)													
1	Mainstem of the Dolores River from the bridge at Bradfield Ranch (Forest Route 505, near Montezuma/Dolores County Line) to the Little Gypsum Valley Bridge at the San Miguel/Montrose County Line.	62.80	•				•				•	•	

Stream Segment ¹	Segment Description ¹	Stream Miles ¹	Aquatic Life ¹				Recreation ¹				Water Supply ¹	Agriculture ¹	Designation ¹
			Cold 1	Cold 2	Warm 1	Warm 2	Existing	Potential	Not Suitable	Undetermined			
2	Mainstem of the Dolores River from the Little Gypsum Valley Bridge at the San Miguel/Montrose County line, to the Colorado/Utah border.	90.70			•		•					•	
3a	All tributaries to the Dolores River, including all lakes, reservoirs, and wetlands, from the bridge at Bradfield Ranch (Forest Route 505, near Montezuma/Dolores County Line) to the Colorado/Utah border, except for specific listings in Segments 3b, 4, and 5.	1,469.90				•	•					•	UP
3b	Mainstem and all tributaries to Salt Creek, including all lakes, reservoirs, and wetlands from the source within the Sinbad Valley to the confluence with the Dolores River.	29.10				•	•					•	UP
4	Mainstem of West Paradox Creek from the source to the confluence with the Dolores River. Mainstem and all tributaries to Blue Creek from the source to the confluence with the Dolores River.	130.80				•	•					•	
5	Mainstem of West Creek from the source to the confluence with the Dolores River; Roc Creek; La Sal Creek and Mesa Creek from their sources to their confluences with the Dolores River.	52.80	•				•				•	•	
Subtotal Segments		6	2	0	1	3	6	0	0	0	2	6	2
Subtotal Miles⁹		1,836.10	115.60	0	90.70	1,629.80	1,836.10	0	0	0	115.60	1,836.10	1,499.00
San Miguel River (COGUSM)													
1	All tributaries, lakes, reservoirs, and wetlands to the San Miguel River within the boundaries of the Lizard Head, and Mount Sneffels Wilderness Areas.	25.80	•				•				•	•	OW
2	All tributaries, including all lakes (including Trout Lake), reservoirs, and wetlands, to the San Miguel River from its sources to a point immediately below the confluence of Leopard Creek with the exceptions listed in Segments 1, 6a, 6b, 7a, 7b, and 8.	173.96	•				•				•	•	
3a	Mainstem of San Miguel River from the confluence of Bridal Veil and Ingram Creeks to a point immediately above the confluence of Marshall Creek.	0.41	•				•					•	

Stream Segment ¹	Segment Description ¹	Stream Miles ¹	Aquatic Life ¹				Recreation ¹				Water Supply ¹	Agriculture ¹	Designation ¹
			Cold 1	Cold 2	Warm 1	Warm 2	Existing	Potential	Not Suitable	Undetermined			
3b	Mainstem of the San Miguel River from a point immediately above the confluence of Marshall Creek to a point immediately above the confluence of South Fork San Miguel River.	7.54	•				•					•	
4a	Mainstem of the San Miguel River from a point immediately above the confluence of the South Fork of the San Miguel to a point immediately below the CC ditch.	44.00	•				•				•	•	
4b	Mainstem of the San Miguel River from a point immediately below the CC ditch to a point immediately below the confluence of Naturita Creek.	7.74		•			•				•	•	
5	Mainstem of San Miguel River from a point immediately below the confluence of Naturita Creek to its confluence with the Dolores River.	22.90			•		•					•	
6a	Mainstem of Ingram Creek, including all tributaries, lakes, reservoirs, and wetlands from source to confluence with San Miguel River.	3.21		•			•					•	
6b	Mainstem of Marshall Creek, including all tributaries, lakes, reservoirs, and wetlands from source to confluence with San Miguel River.	1.51		•			•					•	
7a	Mainstem of Howard Fork and all tributaries, lakes, reservoirs, and wetlands from immediately below the confluence of Swamp Gulch to its confluence with the South Fork of the San Miguel, except for Segment 7b.	6.50	•				•					•	
7b	Waterfall Creek, including all tributaries, lakes, reservoirs, and wetlands, from its source to its confluence with the Howard Fork.	2.75	•				•				•	•	
8	Mainstem of South Fork of San Miguel River from the confluence of the Howard and Lake Forks to its confluence with the San Miguel River.	6.44	•				•				•	•	
9	All tributaries to the San Miguel River, including all lakes, reservoirs, and wetlands from a point immediately below the confluence of Leopard Creek to the Dolores River that are within the boundaries of the Uncompahgre National Forest.	395.50	•				•				•	•	

Stream Segment ¹	Segment Description ¹	Stream Miles ¹	Aquatic Life ¹				Recreation ¹				Water Supply ¹	Agriculture ¹	Designation ¹
			Cold 1	Cold 2	Warm 1	Warm 2	Existing	Potential	Not Suitable	Undetermined			
10	Mainstem of Naturita Creek from the Uncompahgre National Forest boundary to its confluence with the San Miguel River, and Gurley Reservoir; Tabeguache Creek from its source to the confluence with San Miguel River.	52.70	•				•				•	•	
11 + L	West Fork of Naturita Creek, including all tributaries, lakes, reservoirs, and wetlands, and Miramonte Reservoir from its source to the Uncompahgre National Forest Boundary below Miramonte Reservoir and the mainstem of Beaver, Horsefly and Saltado Creeks from the Uncompahgre National Forest boundary to their confluence with the San Miguel River.	34.50 ¹⁸	•				•					•	
12	All tributaries, lakes, reservoirs, and wetlands to the San Miguel River from a point immediately below the confluence of Leopard Creek to the Dolores River with the exceptions listed in Segments 9, 10, and 11.	747.40		•			•				•	•	
Subtotal Segments		16	11	4	1	0	16	0	0	0	9	16	1
Subtotal Miles⁸		1,532.86	750.10	759.86	22.90	0	1,532.86	0	0	0	1,456.29	1,532.86	25.80
Total Segments		114	60	19	11	20	104	9	19	0	65	111	29
Total Miles¹⁹		10,150.03	3,519.36	1,835.02	659.56	4,087.36	8,718.33	1,072.2	2,081.21	0	5,186.95	9,446.5	3,880.38

¹ WQCC 2010a, 2010b; WQCD 2010a, appendices A and B.² Segment is not suitable for recreational uses from November 1 to April 30 and is potentially suitable for recreational uses from May 1 to October 31 annually.³ OW = Outstanding Waters.⁴ Assessed lakes in this segment total 115.70 acres.⁵ Lake-only segment. Lake acres = 5,079.41.⁶ Segment is not suitable for recreational uses from November 1 to April 30; it is listed as having existing recreational uses from May 1 to October 31 annually.⁷ UP = Use Protected.⁸ Totals might not add due to rounding.⁹ Lake acres for this segment are unavailable.¹⁰ Lake-only segment. Lake acres = 147.60.¹¹ Lake-only segment. Lake acres = 2,654.60.¹² Stream miles for this segment are unavailable.¹³ Segment is not suitable for recreational uses from September 11 to May 14; it is listed as having existing recreational uses from May 15 to September 10 annually.¹⁴ Lake-only segment. Lake acres = 626.20.¹⁵ Segment is potentially suitable for recreational uses from November 1 to April 30; it is listed as having existing recreational uses from May 1 to October 31 annually.¹⁶ Lake-only segment. Lake acres = 1,903.95.

¹⁷ Lake-only segment. Lake acres = 5,063.10.

¹⁸ Assessed lakes in this segment total 378.60 acres.

¹⁹ All acres for lake-only segments and lakes that are part of a segment with streams or wetlands and that have been assessed have been individually footnoted and are not included in the segment miles.

Exhibit 9-20. in text

Exhibit 9-21. in text

Exhibit 9-22. in text

Exhibit 9-23. in text

Exhibit 9-24. in text

Exhibit 9-25. San Juan River Basin Wetlands

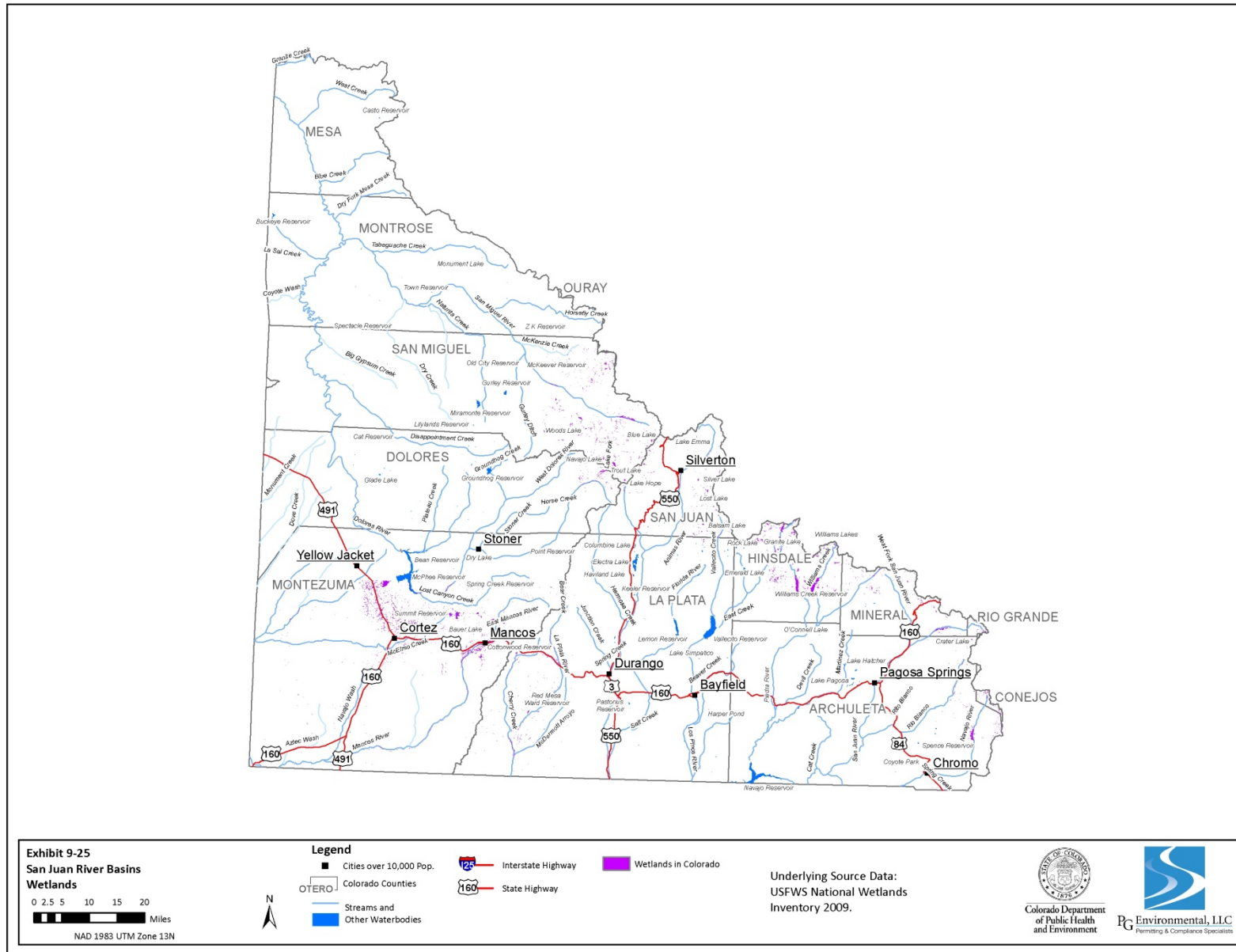


Exhibit 9-26 San Juan River Basin Impaired Stream Segments

Number of Impaired Segments	Total Stream Miles Impaired	Use Categories Not Being Attained (Percent of Classified Uses by Category Basin Wide)						Parameters (number of impacted segments)
		Aquatic Life Cold Water (n=79)	Aquatic Life Warm Water (n=30)	Existing Recreation (n=104)	Not Suitable for Recreation (n=19)	Water Supply (n=65)	Agriculture (n=111)	
Basin-wide (n= 114 segments and 10,150.03 stream miles)								
15	345.66	10 (13%)	2 (7%)	0 (0%)	0 (0%)	0 (0%)	3 (3%)	Iron (3) Copper (1)
Impaired Segments and Miles as Percent of Total Segments and Stream Miles in Basin								
13%	3%							

Sources: WQCC 2010c; WQCD 2010a, appendices A to D.

Exhibit 9-27. San Juan River Basin Impaired Lake/Reservoir Segments

Number of Impaired Lakes	Total Acres Impaired	Use Categories Not Being Attained <i>(Percent of Classified Uses by Category Basin Wide)</i>						Parameters (number of impacted lakes)
		Aquatic Life Cold Water (n=8)	Aquatic Life Warm Water (n=3)	Existing Recreation (n=11)	Not Suitable for Recreation (n=2)	Water Supply (n=10)	Agriculture (n=11)	
Basin-wide (n= 11segments and 15,969.16 acres)								
4	8,386.70	3 (38%)	1 (33%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	Mercury (4)
Impaired Lakes and Acres as Percent of Total Segments and Lake Acres in Basin								
36%	53%							

Sources: WQCC 2010c; WQCD 2010a, appendices A to D.

Exhibit 9-28. San Juan River Basin Impaired Waterbody Segments

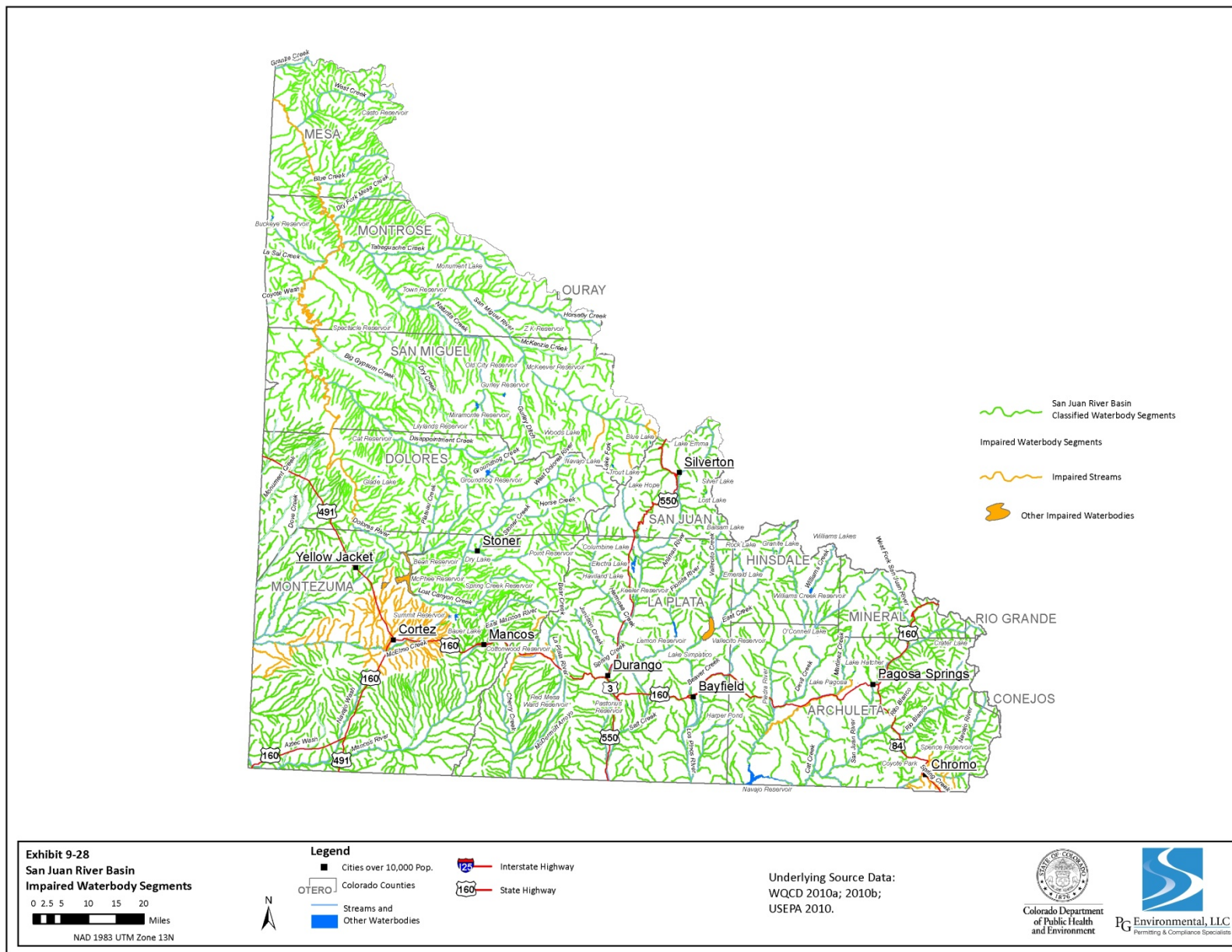


Exhibit 9-29. San Juan River Basin Impairments by Stream Segment¹

Stream Segment	Stream Miles	Were All Uses Attained in 2010?	Segment Portion	Portion Miles ²	Use(s) Not Attained ³								Desig	Parameter(s) Causing Impairments ⁴		Source ⁵	TMDL Development Status ⁶			
					C1	C2	W1	W2	RE	RNS	WS	AG		Fe	Cu		L	M	H	
Animas and Florida River Basin (COSJAF)																				
2	22.90	N	Animas River - Denver Lake to Maggie Gulch	22.90									•	UP ⁷						
4a	7.25	N	Animas River - Mineral Creek to Deer Park Creek.	7.25		•								UP						
4b	48.30	N	Animas River - Deer Park Creek to Bakers Bridge	48.30	•															
7	12.30	N	Cement Creek	12.30									•	UP						
8	12.70	N	Mineral Creek - source to S. Mineral Creek confluence	12.70									•	UP						
9	22.30	N	Mineral Creek (Upper Animas Basin)	22.30		•								UP						
Subtotal Segments Impaired			6																	
Subtotal Miles Impaired			125.75																	
La Plata River, Mancos River, McElmo Creek, and San Juan (COSJLP)																				
3a	99.60	N	Cherry Creek	41.00				•						UP	•		UK			•
4a	134.9	N	E. Mancos River	11.40	•											•	UK			•
Subtotal Segments Impaired			2																	
Subtotal Miles Impaired			52.40																	
Dolores River (COSJDO)																				
9	1.34	N	Silver Creek below Rico's WS diversion	1.34		•														
Subtotal Segments Impaired			1																	
Subtotal Miles Impaired			1.34																	
Lower Dolores River (COGULD)																				
1	62.80	N	all	62.80	•										•		UK			•
2	90.70	N	all	90.70			•								•		UK			•
Subtotal Segments Impaired			2																	

Stream Segment	Stream Miles	Were All Uses Attained in 2010?	Segment Portion	Portion Miles ²	Use(s) Not Attained ³								Desig	Parameter(s) Causing Impairments ⁴		Source ⁵	TMDL Development Status ⁶		
					C1	C2	W1	W2	RE	RNS	WS	AG		Fe	Cu		L	M	H
Subtotal Miles Impaired			153.50																
San Miguel River (COGUSM)																			
3a	0.41	N	San Miguel River - Bridal Vail/Ingram Creeks to Marshall Creek	0.41	•														
3b	7.54	N	San Miguel River - Marshall Creek to S. Fork San Miguel River	7.54	•														
6a	3.21	N	Ingram Creek	3.21		•													
6b	1.51	N	Marshall Creek	1.51		•													
Subtotal Segments Impaired			4																
Subtotal Miles Impaired			12.67																
Total Segments Impaired			15																
Total Miles Impaired			345.66																

¹ The table includes all segments that are not attaining one or more of their classified uses as presented in appendix A of the 2010 Integrated Report. This can include segments for which a TMDL has been developed (which means the segment is not listed on the 2010 CWA section 303(d) list (Regulation No. 93) (WQCC 2010c; WQCD 2010a). For these segments it likely means that the full effects of TMDL implementation are yet to be realized and the segment has yet to attain its classified uses. The cells for "parameters causing impairments," "source(s)," and "TMDL development status" are left blank in these cases.

² Totals might not add due to rounding. Note that lake acres have not been totaled.

³ Key to Classified Uses: C1 = Aquatic Life Cold Water 1, C2 = Aquatic Life Cold Water 2, W1 = Aquatic Life Warm Water 1, W2 = Aquatic Life Warm Water 2, RE = Recreation Existing, RNS = Recreation Not Suitable, WS = Water Supply, and AG = Agriculture.

⁴ Key to Parameters: Cu = copper and Fe = iron.

⁵ Key to Sources: UK = unknown.

⁶ Key to TMDL Development Status: L = low priority, M = medium priority, and H = high priority.

⁷ UP = Use Protected.

Sources: WQCC 2010c; WQCD 2010, appendices A to D.

Exhibit 9-30. San Juan River Basin Impairments by Lake/Reservoir Segment¹

Lake Segment	Lake Acres	Were All Uses Attained in 2010?	Segment Portion	Portion Acres ²	Use(s) Not Attained ³								Desig	Parameter(s) Causing Impairments ⁴	Source ⁵	TMDL Development Status ⁶		
					C1	C2	W1	W2	RE	RNS	WS	AG		Hg		L	M	H
San Juan River Basin (COSJSJ)																		
6a	⁷	N	Echo Canyon Reservoir	115.70	●									●	UK			●
Los Pinos River Basin (COSJPN)																		
3	2,654.60	N	Vallecito Reservoir	2,654.60	●									●	UK			●
La Plata River, Mancos River, McElmo Creek, and San Juan (COSJLP)																		
11	1,903.95	N	Narraguinnep Reservoir, Totten Reservoir	1,580.80			●							●	UK			●
Dolores River (COSJDO)																		
4b	5,063.10	N	McPhee Reservoir	4,035.60	●									●	UK			●
Total Segments Impaired			4															
Total Lake Acres Impaired			8,386.70															

¹ The table includes all segments that are not attaining one or more of their classified uses as presented in appendix B of the 2010 Integrated Report. This can include segments for which a TMDL has been developed (which means the segment is not listed on the 2010 CWA section 303(d) list (Regulation No. 93) (WQCC 2010c; WQCD 2010a). For these segments it likely means that the full effects of TMDL implementation are yet to be realized and the segment has yet to attain its classified uses. The cells for "parameters causing impairments," "source(s)," and "TMDL development status" are left blank in these cases.

² Totals might not add due to rounding.

³ Key to Classified Uses: C1 = Aquatic Life Cold Water 1, C2 = Aquatic Life Cold Water 2, W1 = Aquatic Life Warm Water 1, W2 = Aquatic Life Warm Water 2, RE = Recreation Existing, RNS = Recreation Not Suitable, WS = Water Supply, and AG = Agriculture.

⁴ Key to Parameters: Hg = mercury.

⁵ Key to Sources: UK = unknown.

⁶ Key to TMDL Development Status: L = low priority, M = medium priority, and H = high priority.

⁷ Assessed lakes in this segment total 115.70 acres.

Sources: WQCC 2010c; WQCD 2010, appendices A to D.

Exhibit 9-31. San Juan River Basin Waterbody Segments Listed for Further Monitoring and Evaluation

Segment	Segment Portion(s)	Parameters of Concern and Source(s) if Known							
		Iron	Sediment	<i>E. coli</i>	Aquatic Life Use	Cadmium	Manganese	Copper	Lead
La Plata River, Mancos River, McElmo Creek, and San Juan (COSJLP)									
8a	All	•							
Piedra River Basin (COSJPI)									
6a	Stollsteimer Creek above Southern Ute Boundary		•						
San Juan River Basin (COSJSJ)									
3	All			•					
8	Navajo Reservoir				•				
San Miguel River (COGUSM)									
2	Bilk Creek					•			
3a	Below Idarado Mine					•			
6a	All					•	•		
6b	All					•		•	•
Total Segments with One or More Portions on M&E List	8	1	1	1	1	4	1	1	1
Total as Percent of All Segments in Sub-basin, n=114	7%	1%	1%	1%	1%	4%	1%	1%	1%

Sources: WQCC 2010c; WQCD 2010, appendices A to D.

Exhibit 9-32. in text

Exhibit 9-33. in text

Exhibit 9-34. in text

Exhibit 9-35. San Juan River Basin Completed and Approved TMDLs

Segment No. and Portion Description	Pollutant(s) Addressed (TMDL Date)	Source(s)	Watershed Description	Current and Possible Future Strategies Identified in TMDL Reports ¹
Animas and Florida River Basins (COSJAF)				
COSJAF02 Animas River and tributaries, Denver Lake to Maggie Gulch	Aluminum Cadmium Copper Iron Lead	The TMDL is archived. ²		
COSJAF03b Animas River, Cement Creek to Mineral Creek	Aluminum Cadmium Copper Iron Lead	The TMDL is archived. ²		
COSJAF04a Animas River, Mineral Creek to Deer Park Creek	pH Copper Iron Zinc	The TMDL is archived. ²		
COSJAF04b Animas River, Deer Park Creek to Bakers Bridge	Zinc	The TMDL is archived. ²		
COSJAF07 Cement Creek, Source to Animas River	Aluminum Cadmium Copper Iron Lead	The TMDL is archived. ²		
COSJAF08 Mineral Creek, Source to South Mineral Creek	Aluminum Cadmium Copper Iron Lead	The TMDL is archived. ²		
COSJAF09b Mineral Creek, South Mineral Creek to Animas River	pH Copper Iron Zinc	The TMDL is archived. ²		
Dolores River Basins (COSJDO)				
COSJDO04 McPhee & Narraguinnep Reservoirs – Phase 1 Source: WQCD 2003.	Mercury (2003)	Historic mining activities and atmospheric deposition.	The waterbodies of concern in this TMDL are the McPhee and Narraguinnep Reservoirs, located in Montezuma County in southwestern Colorado. The general characteristics of the two reservoirs and their watersheds are summarized only briefly here. McPhee Reservoir is an impoundment of the Dolores River (USGS Hydrologic Cataloging Unit [HUC] 14030002) constructed by the Bureau of Reclamation in Montezuma County, Colorado and operated by the Dolores Water Conservancy District. The reservoir was completed in 1986. It has a surface area of 4,470 acres and a storage capacity of 381,051 acre-feet at 6,924 feet above Mean Sea Level (MSL).	Previous and Current Activities: The Phase I TMDL consists of the following: identification of data and information collected, the data collection process, the modeling of the results, and preliminary loading estimates and allocations. Phase I also includes a summary of the additional data collection and analyses needed to reduce the uncertainty associated with the preliminary loading estimates and allocations so that revised estimates can be made. Future Activities: In Phase II, CDPHE intends to gather the necessary data and perform the analyses identified in Phase I to produce a revised TMDL for mercury in McPhee and Narraguinnep Reservoirs.

Segment No. and Portion Description	Pollutant(s) Addressed (TMDL Date)	Source(s)	Watershed Description	Current and Possible Future Strategies Identified in TMDL Reports ¹
			<p>Narraguinnep Reservoir is a privately owned impoundment constructed in 1907. It has a surface area of 625 acres at full pool and a storage capacity of 18,960 acre-feet at 6,680 feet above MSL. The watershed for Narraguinnep Reservoir lies in a different HUC (14080202) than McPhee Reservoir. However, the majority of water in Narraguinnep is supplied by McPhee Reservoir via interbasin transfer.</p>	<p>Summary of data collection and analyses to be completed in Phase 2.</p> <p>1. Estimation of Loading Capacity of the Reservoirs</p> <ul style="list-style-type: none"> Collect data on fish community structure, age/weight relationships, trophic status, and bioenergetics (if possible) from both reservoirs. Collect information on trophic relationships and mercury levels in forage fish, benthos, and other trophic levels (where possible) from both reservoirs. Collect additional sediment chemistry data, particularly from Narraguinnep Reservoir. Collect additional water chemistry data (especially vertical profiles) to better characterize the annual mercury cycle in the reservoir. Generate a lake mercury model for Narraguinnep and revise the model for McPhee based on the new information (thus allowing a more accurate estimate of loading capacity of both reservoirs). <p>2. Estimation of External Loads</p> <ul style="list-style-type: none"> Collect sediment and water chemistry data from the 10 new sites proposed in Section 7.2. Collect additional sediment and water chemistry data from the seven existing sites that need additional data. Collect mercury deposition data from the new monitoring station in Mesa Verde, Colorado. Collect additional data on mercury concentrations in snowpack within the McPhee watershed from USGS studies. Collect additional data from sediment cores from Narraguinnep reservoir from USGS studies. <p>3. Data Analysis</p> <ul style="list-style-type: none"> Review and analyze new information collected combined with data previously collected to derive new loading and allocation estimates as necessary. Produce a model for Narraguinnep reservoir using new data. <p>4. TMDL Review and Revision</p> <ul style="list-style-type: none"> Revise TMDL as necessary based on new information and analyses. Review TMDL progress consistent with monitoring plan.
<p>COSJDO09 Silver Creek, Town of Rico Water Supply Diversion to Dolores River</p> <p>Source: WQCD 2008c.</p>	<p>Cadmium Zinc (2008)</p>	<p>Natural geologic conditions and Historic mining activities.</p>	<p>The Silver Creek drainage basin lies to the east of the town of Rico and encompasses approximately 5 square miles. It is flanked on the south by Blackhawk Mountain, the highest peak in the area, with an elevation of 12,677 feet. Many small tributaries flow into Silver Creek, which is 3.5 miles long and the principle drainage in the basin. Silver Creek flows westward under State Highway 145 through a concrete box culvert, before flowing northwest to its confluence with the Dolores River. The stream</p>	<p>Previous and Current Activities: Several Voluntary Clean-up Projects (VCUPs) were undertaken by ARCO to control mine tailings in the Silver Creek and Dolores River watersheds. A concrete barrier was installed in the Blaine Tunnel in the 1990s, and the flow was diverted through the St. Louis Tunnel and into the Dolores River. The increased flow in the Dolores River allows for a higher dilution of the discharged metals and a greater assimilative capacity, thus decreasing the metals load in Silver Creek.</p>

Segment No. and Portion Description	Pollutant(s) Addressed (TMDL Date)	Source(s)	Watershed Description	Current and Possible Future Strategies Identified in TMDL Reports ¹
			<p>discharge peaks in the late spring at around 100 cubic feet/second during peak runoff. The stream channel is about 6 feet in depth by 6 to 8 feet in width. Bed load (bottom substrate) is not embedded (loose) and consists of cobbles and boulders from 4 to 18 inches in diameter.</p> <p>There are source areas within this catchment that are releasing metals into solution. These source areas seem to be routinely associated with the Argentine tailings pile area and an unnamed adit below the Argentine seep associated with the overhead tramway along Silver Creek, but above the Dolores River confluence.</p> <p>The Nora Lily Mine, which is located below the St. Louis adit to the east of the Dolores River, generates an unknown contribution of degraded water to the Dolores River and the St. Louis settling ponds. The Revenue Mine, which is located on the south side of Silver Creek, contains several mine waste dumps with seeps that may contribute to the degraded water quality of Silver Creek. Since there is no discernable point discharge associated with the mine, it is difficult to isolate its specific contribution to metals concentrations in Silver Creek.</p>	<p>Future Activities:</p> <p>In order to insure that the TMDL is adequately protective of the segment, monitoring of Silver Creek is required. Previous data were gathered at either high or low flow regimes, so a monthly flow analysis would be essential to fill in the data gaps for metals loading in Silver Creek. Additional monitoring of the Argentine Seep, Blaine Adit Discharge, and Tramway Discharge would also be beneficial. Additional aquatic life monitoring data would be useful to further document the current status of Silver Creek and the potential for restoration.</p>
La Plata River, Mancos River, McElmo Creek, and San Juan (COSJLP)				
COSJLP04 Box Canyon Creek	Sediment	The TMDL is archived. ²		
COSJLP08 McPhee & Narraguinnep Reservoirs – Phase 1	See McPhee Reservoir – Phase 1 TMDL discussion above as these two TMDLs are linked within one document.			
Source: WQCD 2003.				
San Miguel River Basin (COSJSM)				
<p>COGUSM03a</p> <p>Mainstem of San Miguel River from the confluence of Bridal Veil and Ingram Creeks to a point immediately above the confluence of Marshall Creek</p> <p>COGUSM03b</p> <p>Mainstem of the San Miguel River from a point immediately above the confluence of Marshall Creek to a point</p>	<p>Zinc</p> <p>Cadmium</p> <p>(2008 TMDL incorporates zinc in all four segments and cadmium in segment 3b only)</p> <p>(2010 Addendum incorporates Cadmium in segments 3a, 6a, and 6b)</p>	Historic mining activities.	<p>The San Miguel River originates in the San Juan Mountains of San Miguel County near Telluride, Colorado. The headwater tributaries flow through historic mining areas. The regulatory segments of concern for this TMDL include San Miguel segments COGUSM03a, COGUSM03b, COGUSM06a, and COGUSM06b. All four segments fall within the Hydrologic Unit 14030003.</p> <p>The San Miguel watershed area above the USGS Placerville gauge is 310 square miles. The watershed area of the four segments addressed by this TMDL is approximately 50.74 square miles. The tributaries to the San Miguel drain several historic mining districts; however, no active mining is currently underway in the region.</p>	<p>Previous and Current Activities:</p> <p>The State of Colorado filed suit against the Idarado Mining Company (Idarado) for natural resource damages under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in 1983. Court actions and negotiations continued until 1992 when a Consent Decree was finalized in federal court. The Consent Decree included a Remedial Action Plan describing required clean-up that involved stabilizing and re-vegetating tailings piles, clearing sediments, diverting surface runoff around mine wastes and re-routing internal mine waters away from mineralized regions in the underground workings. The mine company was responsible for the remediation.</p> <p>Future Activities:</p> <p>There is no known cadmium or additional zinc remediation planned for the San Miguel watershed segments addressed in this TMDL other than</p>

Segment No. and Portion Description	Pollutant(s) Addressed (TMDL Date)	Source(s)	Watershed Description	Current and Possible Future Strategies Identified in TMDL Reports ¹
<p>immediately above the confluence of South Fork San Miguel River</p> <p>COGUSM06a Mainstem of Ingram Creek including all tributaries, lakes, reservoirs, and wetlands from source to confluence with San Miguel River</p> <p>COGUSM06b Mainstem of Marshall Creek including all tributaries, lakes, reservoirs, and wetlands from source to confluence with San Miguel River</p> <p>Sources: WQCD 2008b and WQCD 2010c.</p>			<p>The Idarado Mine Natural Resource Damage site is located in the upper basin and is undergoing remedial activities. The Idarado Mine is located between Telluride and Ouray. The western portal of the mine is approximately 2 miles east of Telluride on the San Miguel River, upstream from Marshall Creek, but downstream from the Ingram/Bridal Veil confluence. Water flows into infiltration lagoons, with no discernable point source to the river. The Idarado Mine includes seven infiltration lagoons, six tailings ponds, and numerous mine waste piles.</p>	<p>remediation required by and described in the Consent Decree. This remediation has been completed by Idarado. Sources of cadmium and zinc are diffuse rather than readily identifiable point sources. The remediation required by the Consent Decree did not target attainment of surface water standards. The observed exceedances of cadmium and zinc probably are due to effects of the mining features in the upper basins.</p> <p>Continued monitoring should be conducted to confirm that the TMDLs are protective of the uses assigned to the listed segments. The WQCD will conduct routine monitoring in the basin in anticipation of the 2011 surface water standards rule making hearing for the Gunnison Basin. No ongoing monitoring efforts other than the Division's activities have been identified. It is likely that those segments not currently listed for cadmium will be included for that parameter on the 2010 303(d) list of impaired waters. The standards for these metals are hardness-based Table Value Standards. Additional monitoring for cadmium and hardness is recommended.</p>
COGUSM03b San Miguel River below Idarado	Sediment	The TMDL is archived. ²		

¹ The strategies indicated are those noted in the TMDL reports as those taking place at the time the TMDL was developed and those projected for the future. The exhibit does not report on the current status of any of these activities as this information was not readily available for the first SWQMP.

² Archived TMDLs may be obtained by sending an email to comments.wqcd@state.co.us. Due to time and resource constraints, these TMDLs were not accessed and reviewed for the first SWQMP.

Exhibit 9-36. in text

Exhibit 9-37. in text

Exhibit 9-38. San Juan River Basin Point Source Projects and Scheduled Improvements¹

County	Permit Number	Permit Type, Expiration Date & Status ²	Facility or Authority Project Name Address (if available)	Source Info ³	IUP ⁴ No.	Applicable IUP Appendices ⁵	Project Type ⁶	Project Description	Estimated Cost	Population to Benefit from Project
Archuleta	0022845	NPDES 12/31/2009 Effective	Pagosa Springs Sanitary District South End Of Fifth Street Pagosa Springs, CO 81147	CWNS, Envirofacts, and IUP	030210W	B and C	WWT	New Wastewater Treatment Plant	\$6,800,000	2,100
					050040W	B	NPS	Nonpoint Source Project	\$300,000	10,000
					090084W	B	WWT	New or Improvements to Biosolids Handling Facility; Collection System and/or Interceptor Construction or Rehabilitation; Improvement/Expansion of Wastewater Treatment Plant; Green Infrastructure, Water Efficiency, Energy Efficiency	\$8,750,000	1,709
	G640085	NPDES Gen.	Pagosa Area Water and Sanitation District	CWNS and IUP	030209W	B and C	WWT	Improvement/Expansion of Wastewater Treatment Plant; Consolidation of Wastewater Treatment Facilities; Collection System and/or Interceptor Construction or Rehabilitation; New or Improvements to Biosolids Handling Facility	\$7,575,606	10,000
	0104300	NPDES			100047W	B	WWT	Improvement/Expansion of Wastewater Treatment Plant; Collection System and/or Interceptor Construction or Rehabilitation	\$3,540,000	10,000
	0031755	NPDES 10/31/2010 Effective			NA	NA	NA		NA	NA
	G588000 (G584013)	NPDES Gen.	San Juan River Village Municipal District	CWNS and IUP	050050W	B	WWT	Improvement/Expansion of Wastewater Treatment Plant; Collection System and/or Interceptor Construction or Rehabilitation	\$110,000	500
	0031755	NPDES 10/31/2010 Effective	Vista WWTF ⁷ 100 Lyn Avenue Pagosa Springs, CO 81157	Envirofacts	NA	NA	NA		NA	NA
	0041785	NPDES 7/31/2006 Expired	Wolf Creek Ski Corporation 1 mile East of Wolf Creek Pass on Highway 160 Pagosa Springs, CO 81147	Envirofacts	NA	NA	NA		NA	NA
Total for Archuleta County									\$27,075,606	

County	Permit Number	Permit Type, Expiration Date & Status ²	Facility or Authority Project Name Address (if available)	Source Info ³	IUP ⁴ No.	Applicable IUP Appendices ⁵	Project Type ⁶	Project Description	Estimated Cost	Population to Benefit from Project
Dolores	-		Rico , Town of	CWNS and IUP	030230W	B	WWT	New Wastewater Treatment Plant; Collection System and/or Interceptor Construction or Rehabilitation; Eliminate ISDS	\$14,000,000	250
					050048W	B	NPS	Nonpoint Source Project	\$1,000,000	250
Total for Dolores County									\$15,000,000	
La Plata	R05A002		Badger Daylighting Disposal Facility 664 Road J Ignacio, CO 81137	Envirofacts	NA	NA	NA		NA	NA
	G582037	NPDES Gen.	Bayfield, Town of 1200 South East Street Bayfield, CO 81122	Envirofacts and IUP	030017W (Gem Village)	B and C	WWT	New Wastewater Treatment Plant; Improvement/Expansion of Wastewater Treatment Plant; Collection System and/or Interceptor Construction or Rehabilitation	\$8,000,000	2,500
	0048291	NPDES			NA	NA	NA		NA	NA
	0020273	NPDES 10/31/2011 Effective	Bayfield Sanitation District County Road 521 Bayfield, CO 81122	CWNS and Envirofacts	NA	NA	NA		NA	NA
	R10A517		Betelgeuse Well and Association Pipe SH 151 and La Plata County Road 324 La Plata County, CO	Envirofacts	NA	NA	NA		NA	NA
	R10A178	4/26/2012 Effective	Chris Zell Clover Meadows Subdivision Bayfield, CO 81122	Envirofacts	NA	NA	NA		NA	NA
	R105139	5/25/2009 Effective	David Disanto Hidden Valley and Arroyo Drive Durango, CO 81301	Envirofacts	NA	NA	NA		NA	NA
	0024082	NPDES 1/31/2011 Effective	Durango, City of 105 South Camino Del Rio Durango, CO 81301	Envirofacts	NA	NA	NA		NA	NA

County	Permit Number	Permit Type, Expiration Date & Status ²	Facility or Authority Project Name Address (if available)	Source Info ³	IUP ⁴ No.	Applicable IUP Appendices ⁵	Project Type ⁶	Project Description	Estimated Cost	Population to Benefit from Project
La Plata	G650075	NPDES Gen. 10/19/2012 Effective	Durango, City of WWTP ⁸ 105 Camino Del Rio Durango, CO 81301	Envirofacts	NA	NA	NA		NA	NA
	R05A041		Durango La Plata Airport 1000 Airport Road Durango, CO 81303	Envirofacts	NA	NA	NA		NA	NA
	0047457	NPDES 12/31/2013 Effective	Durango/La Plata County Airport 1000 Airport Road, Box 1 Durango, CO 81303	Envirofacts	NA	NA	NA		NA	NA
	G582024	NPDES Gen. 7/31/2004 Admin. Continued	Durango West Municipal District No.2	CWNS and IUP	040014W	B and C	WWT	Improvement/Expansion of Wastewater Treatment Plant	\$913,672	1,713
	0024082	NPDES 1/31/2011 Effective	Durango WWTP	CWNS and IUP	040015W	B	WWT	New or Improvements to Biosolids Handling Facility; Green Infrastructure, Water Efficiency, Energy Efficiency	\$2,600,000	16,000
	R106455		Edgemont Highlands East Of Edgemont Silver Queen Durango, CO 81301	Envirofacts	NA	NA	NA		NA	NA
	0040266	NPDES 3/31/2007 Expired	Edgemont Ranch Metro District WWTF 5972 County Road 234 Durango, CO 81301	CWNS, Envirofacts, and IUP	080004W	B	WWT	New Wastewater Treatment Plant	\$1,000,000	800
					090083W	B	WWT	Collection System and/or Interceptor Construction or Rehabilitation	\$40,000	200
					100021W	B	WWT	Improvement/Expansion of Wastewater Treatment Plant	\$1,500,000	725
	G584000	NPDES Gen.	Forest Lakes Metro District County Road 501, 6.5 miles north of town Bayfield, CO 81122	Envirofacts and IUP	030097W	B	WWT	Improvement/Expansion of Wastewater Treatment Plant; Collection System and/or Interceptor Construction or Rehabilitation; Eliminate ISDS ⁹	\$2,500,000	1,318
	0048160	NPDES			NA	NA	NA		NA	NA

County	Permit Number	Permit Type, Expiration Date & Status ²	Facility or Authority Project Name Address (if available)	Source Info ³	IUP ⁴ No.	Applicable IUP Appendices ⁵	Project Type ⁶	Project Description	Estimated Cost	Population to Benefit from Project
La Plata	G584025	NPDES Gen. 12/31/2004 Admin. Continued	Forest Lakes WWTP	CWNS	NA	NA	NA		NA	NA
	0039691	NPDES 9/30/2009 Effective	Formerly Cascade Village 50827 US Highway 50 North Durango, CO 81301	Envirofacts	NA	NA	NA		NA	NA
	0045349	NPDES 2/28/2014 Effective	Haciendas De La Florida Homeowners Association 288 County Road 243 Durango, CO 81301	Envirofacts	NA	NA	NA		NA	NA
	G588010 (G584010)	NPDES Gen. 5/31/2010 Effective	Hermosa Sanitation District	CWNS and IUP	050028W (Hermosa Sanitation District)	B and C	NPS	Nonpoint Source Project	\$1,000,000	2,500
					050027W	B and C	WWT	Improvement/Expansion of Wastewater Treatment Plant; Collection System and/or Interceptor Construction or Rehabilitation	\$1,725,000	2,500
	0034959	NPDES 12/31/2012 Effective	Ignacio Peak Wastewater Lagoon Ignacio, CO	Envirofacts	NA	NA	NA		NA	NA
	0026468	NPDES 7/31/2007 Admin. Continued	Lightner Creek Campground 1567 County Road 207 Durango, CO 81301	Envirofacts	NA	NA	NA		NA	NA
	G582028	NPDES Gen. 7/31/2004 Admin. Continued	Loma Linda Sanitation District	CWNS and IUP	030171W	B and C	WWT	Improvement/Expansion of Wastewater Treatment Plant	\$915,000	925
	R05A071		Red Cedar Gathering - Coyote Gulch Gas - CAA S17 T32N, R11W Southern Ute Reservation Ignacio, CO 81137	Envirofacts	NA	NA	NA		NA	NA

County	Permit Number	Permit Type, Expiration Date & Status ²	Facility or Authority Project Name Address (if available)	Source Info ³	IUP ⁴ No.	Applicable IUP Appendices ⁵	Project Type ⁶	Project Description	Estimated Cost	Population to Benefit from Project
La Plata	R05A091		Sky Ute Sand And Gravel - Weaselskin Pit 8.5 County Road 213 Durango, CO 81301	Envirofacts	NA	NA	NA		NA	NA
	G584000 (G584057)	NPDES Gen. 10/31/1999 Expired	South Durango Sanitation District	CWNS and IUP	100014W	B	WWT	Improvement/Expansion of Wastewater Treatment Plant; Green Infrastructure, Water Efficiency, Energy Efficiency	\$400,000	15,000
	R10A921		South Durango Sanitation District A-Line Replacement Durango, CO	Envirofacts	NA	NA	NA		NA	NA
	0048186	NPDES	Southern Ute Bean Pit P.O. Box 350 Ignacio, CO 81137	Envirofacts	NA	NA	NA		NA	NA
	0022853	NPDES 8/31/2009 Effective	Southern Ute Indian Tribe 16364 Highway 172 Ignacio, CO 81137	Envirofacts	NA	NA	NA		NA	NA
	0048178	NPDES	Southern Ute Utilities Division Raw Water Line Project P.O. Box 1137 Ignacio, CO 81137	Envirofacts	NA	NA	NA		NA	NA
	0034967	NPDES	Southern Ute Water Treatment Plant 293 Mouache Circle Ignacio, CO 81137	Envirofacts	NA	NA	NA		NA	NA
	G650177	NPDES Gen. 10/19/2012 Effective	Tamarron WWTP 527 County Road 200 La Plata County, CO	Envirofacts	NA	NA	NA		NA	NA
	0041548	NPDES 1/31/2009 Expired	Umtra Bodo Canyon WWTF 3.5 miles southwest of US Highway 160 and 550 Durango, CO 81302	Envirofacts	NA	NA	NA		NA	NA

County	Permit Number	Permit Type, Expiration Date & Status ²	Facility or Authority Project Name Address (if available)	Source Info ³	IUP ⁴ No.	Applicable IUP Appendices ⁵	Project Type ⁶	Project Description	Estimated Cost	Population to Benefit from Project
La Plata	0047147	NPDES 12/31/2010 Effective	Upper Valley Sanitation District 671 Mushroom Lane Bayfield, CO 81122	Envirofacts	NA	NA	NA		NA	NA
	0034894	NPDES	Usbor-Animas-La Plata Project 1/2 miles southeast of business district Durango, CO 81301	Envirofacts	NA	NA	NA		NA	NA
Total for La Plata County									\$20,593,672	
Mesa	0047562	NPDES 8/31/2012 Effective	Whirlwind Project 30100 5/10 Road Gateway, CO 81522	NPDES						
Total for Mesa County									\$0	
Montezuma	G650153	NPDES Gen. 10/19/2012 Effective	Cortez Sanitation District South of Cortez Cortez, CO 81321	Envirofacts and IUP	NA	NA	NA		NA	NA
	0027545	NPDES			100004W	B and C	WWT	Collection System and/or Interceptor Construction or Rehabilitation; Sanitary Sewer Overflow Correction	\$5,000,000	8,500
					100005W	B and C	WWT	Improvement/Expansion of Wastewater Treatment Plant; Improvement/New Biosolids Handling Facility	\$600,000	8,500
	0040509	NPDES 7/31/2006 Expired	Dolores, Town of 29450 Road U Dolores, CO 81323	CWNS, Envirofacts, and IUP	030078W	B	WWT	Improvement/Expansion of Wastewater Treatment Plant; Reuse Facility	\$450,000	1,025
					040013W	B	NPS	Nonpoint Source Project	\$50,000	1,025
					090005W	B	StW	Stormwater Project	\$500,000	890
	0046957	NPDES Pending	Lakeside WWTP 28330 Road K.2 Cortez, CO 81321	Envirofacts	NA	NA	NA		NA	NA
	0048194	NPDES	Lob Lolly Industrial Site P.O. Box 88 Cortez, CO 81321	Envirofacts	NA	NA	NA		NA	NA

County	Permit Number	Permit Type, Expiration Date & Status ²	Facility or Authority Project Name Address (if available)	Source Info ³	IUP ⁴ No.	Applicable IUP Appendices ⁵	Project Type ⁶	Project Description	Estimated Cost	Population to Benefit from Project
Montezuma	0021687	NPDES 1/31/2013 Effective	Mancos, Town of 941 1/2 Riverside Mancos, CO 81328	CWNS, Envirofacts, and IUP	030178W	B and C	WWT	Improvement/Expansion of Wastewater Treatment Facilities; New or Improvements to Biosolids Handling Facility; Collection System and/or Interceptor Construction or Rehabilitation	\$2,825,000	1,222
	0034398	NPDES 12/31/2010 Effective	Mesa Verde National Park P.O. Box 8 Mesa Verde National Park, CO 81330	Envirofacts	NA	NA	NA		NA	NA
	0027545	NPDES 4/30/2010 Effective	Southwest WWTF Southwest of town, east of Highway 160/666 Cortez, CO 81321	Envirofacts	NA	NA	NA		NA	NA
	0034851	NPDES 9/30/2008 Admin. Continued	Towaoc Wastewater Lagoons Ute Mountain 201 (BIA Road#) Towaoc, CO 81334	Envirofacts	NA	NA	NA		NA	NA
	0034622	NPDES 3/31/2013 Effective	USDI-NPS-Mesa Verde National Park P.O. Box 8 Mesa Verde National Park, CO 81330	Envirofacts	NA	NA	NA		NA	NA
	0037702	NPDES 5/31/2012 Effective	Vista Verde Village 28260 Highway 160 Cortez, CO 81321	Envirofacts	NA	NA	NA		NA	NA
Total for Montezuma County									\$9,425,000	
Montrose	0036251	NPDES 1/31/2008 Expired	JD-7 and JD-9 Mines 15 Miles West of Town Naturita, CO 81422	NPDES						
	0000213	NPDES 3/31/2012 Effective	New Horizon Mine 27646 West Fifth Avenue Nucla, CO 81424	NPDES						
	0024007	NPDES 7/31/2010 Effective	Naturita, Town of 3/4 Mile West of Town Naturita, CO 81422	CWNS, NPDES, and IUP	050038W	B and C	WWT	Collection System and/or Interceptor Construction or Rehabilitation	\$500,000	635

County	Permit Number	Permit Type, Expiration Date & Status ²	Facility or Authority Project Name Address (if available)	Source Info ³	IUP ⁴ No.	Applicable IUP Appendices ⁵	Project Type ⁶	Project Description	Estimated Cost	Population to Benefit from Project
Montrose	143559	NPDES	Nucla/Naturita Wastewater Treatment Facility	IUP	090037W	B and C	WWT	New Regional Wastewater Treatment Facility; Collection System and/or Interceptor Construction or Rehabilitation	\$5,000,000	734
	0000540	NPDES 10/31/2011 Effective	Nucla Station 30739 DD 30 Road Nucla, CO 81424	NPDES						
Total for Montrose County									\$5,500,000	
San Juan	0020311	NPDES 11/30/2010 Effective	Silverton, Town of 3rd and Mineral Silverton, CO 81433	CWNS, Envirofacts, and IUP	070012W	B	NPS	Nonpoint Source Project	\$500,000	550
	G641000	NPDES Gen.			080017W	B	WWT	Improvement/Expansion of Wastewater Treatment Plant	\$500,000	550
Total for San Juan County									\$1,000,000	
San Miguel	0041840	NPDES 1/31/2007 Admin. Continued	Regional Wastewater Treatment Facility 12000 Highway 145 Telluride, CO 81435	NPDES						
	0046931	NPDES 9/30/2010 Effective	Silver Bell Tailings Impoundment Inside Ohpir Loop on Highway. 45 Ophir, CO 81426	NPDES						
	0041840	NPDES 1/31/2007 Admin. Continued	Telluride, Town of 12,000 Highway 145 Telluride, CO 81435	CWNS, NPDES, and IUP	060014W	B	WWT	New Wastewater Treatment Plant	\$10,000,000	2,500
	G650100	NPDES Gen. 10/19/2012 Effective								
Total for San Miguel County									\$10,000,000	

Total Estimated Cost All Projects	\$88,594,278
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¹ Note that this exhibit identifies only NPDES facilities contained in the publicly available data sources evaluated; therefore, it should not be considered an all-inclusive list

² Admin. Continued = Administratively Continued (permit status). For a review of the various NPDES permit types issued by Colorado, consult chapter 3 of the SWQMP.

³ Sources: USEPA 2010a, 2010d; WQCD 2010b.

⁴ IUP = Intended Use Plan (WQCD 2010b).

⁵ The 2010 IUP contains several appendices containing listings of projects. Appendix B is a list of the current construction needs for all identified eligible water quality projects (i.e., project eligibility list), including point source treatment, nonpoint source, stormwater, and source water assessment projects. Appendix C lists projects that are likely to be funded with Water Pollution Control Revolving Funds (WPCRF) loans in 2010. For those projects included in appendix A, the loan value is sometimes lower than the estimated cost. Only the estimated cost as shown in appendix B is shown in this table.

⁶ Project type categories include the following: WWT = advanced or secondary wastewater treatment, including infiltration and inflow correction, NPS = nonpoint source control project, StW = stormwater project, and SWP = source water protection project.

⁷ WWTF = wastewater treatment facility; means same thing as WWTP below; source document (WQCD 2010b) uses both terms interchangeably.

⁸ WWTP = wastewater treatment plant; means same thing as WWTF above; source document (WQCD 2010b) uses both terms interchangeably.

⁹ ISDS = individual sewage disposal systems.

Exhibit 9-39. San Juan River Basin Summary of CWA Section 319 Nonpoint Source Grant Projects

Number of Projects	Fiscal Year	GRTS Project Number	Project Title	Functional Categories	Primary NPS Categories	Secondary NPS Categories	Total Budget	CWA Section 319(h) Portion (percent of total budget)	Other Funding
6	2005	15	Project: Anglo-Saxon/Porcupine Assessment and Characterization	Other Water Quality Assessment/ Monitoring	Resource Extraction	Subsurface Mining	\$81,033	\$45,693 (56%)	\$35,340
	2006	06	Project: Upper Animas Mine Drainage Control	BMP Design/Implementation	Resource Extraction	---	\$312,400	\$187,440 (60%)	\$124,960
	2006	18	Project: Mancos River Watershed Plan	Watershed Management Planning	Agriculture/Resource Extraction	Natural Sources	\$63,150	\$35,000 (55%)	\$28,150
	2007	14	Project: Animas Watershed Plan	Watershed Management Planning	Agriculture	Other NPS Pollution	\$7,870	\$7,870 (100%)	\$0
	2007	06	Project: Dolores River Watershed Plan	Watershed Planning	Hydromodification	Dam Construction	\$47,251	\$26,750 (57%)	\$20,501
	2008	08	Project: Rio Grande Riparian Stabilization Phase 3	Stream Bank Stabilization	All Sources	Channel Erosion/Incision/ Flow Regulations/Modification	\$416,667	\$250,000 (60%)	\$166,667
Basin Totals									
6	2005-2008	--	--	--	--	--	\$928,371	\$552,753 (60%)	\$375,618

Sources: USEPA 2010c; WQCD 2010a.